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Functioning of the device

Your Philips DVD/HDD recorder mainly consists of the following components:

HDD recorder

For recording in a temporary storage on the HDD (Time shift Buffer)

As soon as you turn on the DVD/HDD recorder, it automatically records the current TV channel selected on the DVD/HDD recorder in this temporary storage. As a result, you can 'rewind' to a scene (◀) or watch a still picture (PAUSE II), while the current TV show is still being recorded.

Recordings in the time shift buffer are only temporarily available (factory settings: 3 hours).

For storing recordings on the HDD

You can mark recordings in the time shift buffer for storage on the HDD using $\,$ REC/OTR $\,$ $\,$ $\,$

These recordings will be transferred to the HDD when you switch off the device using **STANDBY** () or when the time periode of the time shift buffer (e.g. 3 hours) expires.

DVD Recorder

For archiving (copying) HDD recordings on a DVD+RW/+R

Recordings on the HDD can be selected in a title overview screen (Media Browser) and then copied (archived) on a DVD+RW/+R.

TV tuner

For recordings independently from your TV set

You can use your DVD/HDD recorder as a TV tuner, allowing you the comfort of pausing a running TV show and continue watching it later. You can make recordings on the HDD without having to turn on the TV set.

DVD/CD/MP3 player

For playing back recorded DVDs, CDs, CD-RW/Rs

You can use this device to play back DVD+R/RWs, DVD-R/RWs, (S)Video CDs(CD-RW/R), Audio CDs(CD-RW/R), MP3 CDs(CD-RW/R) of the respective standard.



The remote control

REC/OTR ● Record the current TV show on the HDD, mark recordings in the time shift buffer to be stored on HDD.

Hold button down to start the recording from now. (Mark the recording from the beginning of the actual position in the Time Shift Buffer).

STANDBY \circlearrowleft To switch set on or off, interrupt menu function.

A programmed recording (TIMER) or an archiving process will be continued until the end, and the device will then be switched off.

CAM Switch to 'Camera mode' (recording directly on the HDD and not through time shift buffer), switch to input sockets (' S-VIDEO (CAM1) / VIDEO (CAM1) ', ' DV IN (CAM2) ').

TV/HDD Switches scart socket **EXT2 AUX-I/O** of the DVD recorder directly to the TV set. This lets you watch the picture from any unit connected to this scart socket (set-top box, video recorder or satellite receiver) and at the same time record from another source.

If you have not connected a device to the **EXT2 AUX-I/O** socket or the device is switched off, you can use this button to switch between TV reception and the signal of the DVD recorder.

This, however, functions only if you have connected your TV set to the DVD recorder using a scart cable (socket **EXT1 TO TV-I/O**) and your TV set reacts to the switching.

RETURN Return to previous menu on a video CD (VCD). This also works with some DVD discs.

Moreover, you can jump back to the previous scene of the time shift buffer or to playback from the HDD. You can switch to the picture of the actual running TV show with the **TUNER** buttoen.

EDIT Call up/Cancel the edit menu.

Call up/Cancel the menu for editing titles during playback.

TIMER ① To make a TIMER programming with/without ShowView® system or to alter/clear programmed recordings.

SELECT Select function/value.

You can mark several titles in the media browser. Switch on repeat play during playback from a disc.

TUNER This button lets you switch to the picture of the internal tuner (TV channel).

During play back from the Time Shift Buffer, you can jump to the actual TV show (live) of the selected TV channel.

SYSTEM MENU Call up/Cancel the system menu.

Depending on the operating mode from which you press this button:

- •) DVD system menu: Press DISC MENU first.
- •) HDD system menu: Press TUNER first.

DISC MENU For displaying the DVD menu or the index screen overview.

INFO For displaying additional information on the screen or the time shift buffer during playback/recording on the HDD (TUNER / BROWSER HDD button).

RED Red function button, in some screens the function of a 'clear' button.

GREEN Green function button

YELLOW Yellow function button

BLUE Blue function button

Overview of functions

BROWSER HDD Call up/cancel the overview of HDD recordings (media browser).



- ▲ ▼ Cursor buttons up, down in the menus.

 Previous or next position in the time shift buffer during playback from HDD.
- Cursor buttons left, right in the menus.
 Previous or next position during playback of a title from the HDD (media browser or time shift buffer). If you hold down this button you can faster brwose trough the recordings. The speed will increase automatically.
- **OK** Confirming of functions
 Starting the playback from the beginning in the 'Media Browser'.
- STOP Stop playback
 Hold down the button to open and close the disc tray.
- **PAUSE II** If this button is pressed during playback, the DVD recorder switches to pause. You will see a still picture. If this button is pressed during recording in the 'Camera mode', the DVD recorder switches to pause and inserts a chapter marker.
- PLAY ► Play back a recorded disc.
 In the GUIDE Plus+® system: OK button.
- **CHANNEL +** Next programme number
- **CHANNEL** Previous programme number
- **JUMP BACK** To jump back a certain time period that can be changed in the settings of the HDD.
 - I◀■ Briefly press the button during playback: Previous chapter or previous title
 - Hold down the button: Search backwards
 Hold down the button during the still picture: slow motion backwards
 - Briefly press the button during playback: Next chapter or next title Hold down the button: Search forwards
 Hold down the button during the still picture: slow motion forward
- **JUMP FWD** To jump forward by a certain time period that can be changed in the settings of the HDD.
 - **0..9** For entering numbers or characters at the corresponding entry fields.
 - T/C Switching between title and chapter for selection using I◀◀ , ▶▶I .

 If '!NF□' appears in the display, the index menu from a recorded disc will be shown or an introductory film will be played. In this case, this function is not available.

DISC MANAGER Call up/Cancel the disc manager (DM).



Overview of functions



Additional TV functions

With the enclosed multicode remote control you can control the main functions of your TV set. To do this, you must first enter a code number that corresponds to the make of your TV set. You will find a summary of all available remote control commands on the last page of this manual. How to enter this code number you will read in the chapter 'Using your DVD-Recorder remote control with your TV set'.

TV VOLUME + Increase TV volume

TV VOLUME - Reduce TV volume

For the following functions you need to hold down the • TV button (on the left side) and then select the function you need with the appropriate button.

STANDBY O Switch on/off TV set

0..9 Number buttons 0 - 9

CHANNEL + To select a higher programme number

CHANNEL — To select a lower programme number

Additional TV functions for Philips TV-sets if supported from the TV. You need to hold down the • TV button (on the left side).

T/C switch Teletext (TXT) on/off

TIMER ⊕ Clock display on the screen on/off

RETURN To return to the previous selected TV program/ previous menu step

SYSTEM MENU Call up the System Menu from the TV

▼ , ▲ In the menus cursor up/down

◀ , ► In the menus cursor left/right

OK Confirm functions or settings

Colour buttons Colour buttons for special functions

TUNER Switching the TV from the external sockets to the internal tuner.



Front of the device

STANDBY-ON \circlearrowleft : To switch device off / on, interrupt a function.

TRAY LED: Red light around the disc tray indicates recording on a DVD+RW/+R.

OPEN/CLOSE ≜ : Open/close disc tray.

GUIDE: Call up/Cancel the GUIDE Plus+® System When GUIDE Plus+® is active, this button lights up white.

OK: To confirm the entry/function.

HDD: Call up the media browser (overview of recordings on the HDD).

During a recording on the HDD this button lights up blue.

UP DOWN: Cursor buttons up, down in the menus. Moves cursor up/down in the GUIDE Plus+® system Previous or next title in the time shift buffer during playback from HDD.

LEFT RIGHT: Cursor buttons left, right in the menus.

Previous or next position during playback of a title from the HDD (media browser or time shift buffer).

 Stores the current TV show on the HDD, mark recordings in the time shift buffer to be stored on HDD.
 Red light around the button indicates:

- •) a recording on a DVD+RW/+R (archiving of titles)
- •) storing of a recording(s) on the HDD.

Play back a recorded disc or a title on the HDD

: : select next title/search forwards

Interrupt playback/recording (Cameramode)

Behind the flap at the right-hand corner on the front

Switching between the sockets VIDEO (CAM1), S-VIDEO (CAM1) is done automatically. If a signal is available at both sockets at the same time, the signal at the S-VIDEO (CAM1) socket has priority. If you change the socket (unplug), you must re-select the socket. (Button CHANNEL — and then CHANNEL —)

S-VIDEO (CAM1): Connection of SVHS/Hi8 camcorders or SVHS/Hi8 video recorders (programme number 'ERM 1')

Yellow socket

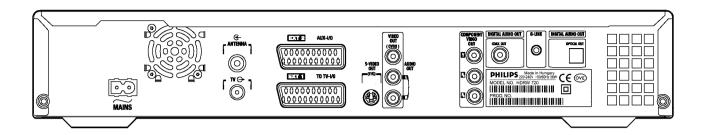
VIDEO (CAM1): Video input socket: Connection of camcorders or video recorders (programme number 'L'AM' 1')

White/red socket

L AUDIO R (CAM1): Audio input socket left/right: Connection of camcorders or video recorders (programme number 'LRM 1')

DV IN (CAM2): digital video input (DV format only), IEEE 1394, FireWire to connecting a digital camcorder or other suitable device (programme number '도위에군').

Overview of functions



Back of the device

∼ MAINS Connection to the mains supply (230V/50Hz)

ANTENNA IN Connection of the aerial

TV OUT Connection of the aerial cable to the TV set

EXT2 AUX-I/O Connection of an additional device (satellite receiver, set-top box, video recorder, camcorder, ...). Input for RGB, S-video signals, input/output for CVBS (video) signals

EXT1 TO TV-I/O Connection of a TV set. Input for RGB, S-video signals, input/output for CVBS (video) signals

Output sockets (AUDIO/VIDEO OUT)

S-VIDEO OUT (Y/C) Connection of an S-Video compatible TV set

VIDEO OUT (CVBS) Yellow cinch socket for the connection of a TV set with video input (CVBS, Composite Video).

AUDIO OUT L/R White/red cinch socket for the connection of a TV set with audio input sockets or an additional device.

COMPONENT VIDEO OUT

Red/blue/green cinch sockets for the connection of an additional device with Component Video input (interlaced, no progressive scan).

Output sockets (DIGITAL AUDIO OUT) COAX OUT

For the connection of a digital audio device using a coaxial cable(cinch cable).

OPTICAL OUT

For the connection of a digital audio device using an optical cable (Toslink).

Output socket (G-LINK™)

G-LINK Connection of the supplied G-LINK™ transmitter (remote control) for an external receiver such as satellite receiver, set-top box, cable TV box.

Welcome to the growing family of owners of PHILIPS equipment. Thank you for buying a HDRW 720/00-02 .



Time-shift TV viewing is possible with the hard disk drive (HDD) in your DVD-Recorder./Hard Disk By storing the recording in a time shift buffer, you can 'rewind' to a scene you missed while the current TV show is still being recorded.

Recordings in the time shift buffer will be automatically deleted e.g. after 3 hours if the period of the time shift buffer is set to 3 hours (factory setting).

Moreover, you can play back a DVD disc or a recorded title from the HDD while the current TV channel is being recorded in the background.

You can store recordings from the time shift buffer on the built-in HDD and transfer (archive) them later on a DVD+RW/+R disc.

Furthermore your Philips DVD Recorder /Hard Disk is a device for recording on DVD+RW/+R Discs and for playing digital video discs see next chapter. In the rest of the user manual the DVD Recorder/Hard Disk will be mentioned as DVD-Recorder.

Please take the time to read this operating manual before using your DVD Recorder. It contains important information on how to set up and operate the device.

We hope you will enjoy your new DVD Recorder / Hard Disk, your Philips team!

If you have any problems operating the device, please read the section entitled 'Before you call an engineer'. If this doesn't help you to resolve the problem, please call the **customer support service** for your country.

The telephone numbers and e-mail addresses can be found at the end of this instruction manual.

You can also visit the website 'http://www.p4c.philips.com'.

Discs you can use

The following discs can be used in your DVD recorder for playback and recording:

Recording and playback



DVD+RW (Digital Versatile Disc + rewriteable) uses phase change media, the same technology on which rewritable CDs are based. A high-performance laser is used to change the reflective properties of the recording layer; this process can be repeated more than a thousand times.



DVD+R (Digital Versatile Disc + recordable)
Unlike a DVD+RW disc, this disc can only be written to once. If it is not finalised after a recording, further recordings can be added to it. Old recordings can be later deleted but they can no longer be overwritten. The deleted recordings (titles) are marked '*Deleted title*'. Before this disc can be played in a DVD player, it must be finalised in the DVD recorder. Once this process is complete, no further recordings can be added.

Playback only



DVD Video (Digital Versatile Disc)

is a storage medium that combines the convenience of the compact disc with the latest digital video technology. DVD video uses modern MPEG2 data compression technology that enables an entire feature film to be stored on a single five-inch disc.



DVD-R(DVD-Recordable)

These discs can only be played back if the recording was made in video mode and the recording was finalised.



DVD-RW (DVD-Rewritable)

These discs can only be played back if the recording was made in video mode and the recording was finalised.



Audio CD (Compact Disc Digital Audio)



Super Audio CD (plays only the CD layer of a hybrid SACD disc)



Video CD (Format I.0, I.I, 2.0)

Introduction



Super Video CD



CD-R (CD-Recordable) with Audio/MP3 content



CD-RW (CD-Rewritable) with Audio/MP3 content

Regional code



DVDs must be marked 'ALL' for all regions or '2' for region 2 to work in this device. Regional code 2 includes: Europe, Japan, South Africa, Middle East (incl. Egypt).

Technical data

You will find more technical data on the last cover page.

Voltage: 220-240V/50Hz

Power consumption: 38W

Power consumption (standby): less than 3W (clock display off)

Power outage/no power: Channel and timer information remain saved for approx. I year, the time is saved for approx. 12 hours. If there is power outage during a recording on the HDD (time shift buffer) at most the last 5 minutes before the power outage will be

Operating position: maximum 10 degree inclination in all directions

Ambient temperature: 15 °C - 35 °C

Humidity: 25% - 75%

Accessories

Operating instructions Guarantee booklet Remote control and batteries Aerial cable Mains cable Scart cable (AV-Euro cable) G-LINK transmitter

Important



/ Caution! Visible and invisible laser radiation. If the cover is open, do not look at the beam.

Because of the risk of eye injuries, only qualified service engineers should open the device and carry out maintenance or repair work.

> CLASS 1 ASER PRODUCT

/ LASER

Typ: Semiconductor lasers InGaAIP (DVD), AIGaAs(CD)

Wavelength: 660nm (DVD), 780nm (CD)

Output power (outside the lens): 20mW (DVD+RW write),

0.8mW (DVD read), 0.3mW (CD read).

Beam divergence: 82 degrees (DVD), 54 degrees (CD)

/\sqrt\) Danger. High voltage! Do not open.

Do not insert objects into the ventilation slots and fan

You run the risk of getting an electric shock.

/ The device does not contain any user-serviceable parts. Please leave all maintenance work to qualified personnel.

//\There are some components in the DVD recorder that keep running as long as the recorder is connected to the power supply. To switch off the DVD recorder completely, you must unplug it from the power supply.

If you disconnect the DVD recorder from the mains, make sure to take the plug out of the wall socket and not just remove the connector from the \sim MAINS socket at the back of the unit. Children playing near the device could suffer injuries at the free end of the cable.

4 Make sure that air can circulate freely through the ventilation slots on the side and the fan opening at the back of the device to avoid overheating. The device should be placed on a firm surface.

 $\cancel{\mathbb{N}}$ Do not insert any objects into the openings or ventilation slots of the device.

These operating instructions have been printed on non-polluting

Please dispose of old batteries safely.

Please take the packaging to your local recycling centre.

This electronic equipment contains several materials that can be recycled. If you are disposing of an old device, please take it to a recycling centre.

No not switch on the device **immediately after transport** from a cold to a warm room or vice versa, or under conditions of extreme humidity.

Wait at least three hours after transporting the device. The DVD

recorder needs this time to acclimate to its new environment (temperature, relative humidity, etc.).

When installing the recorder in a cupboard, ensure there is a gap of approximately 5 cm (2 inch) around the recorder to enable air to circulate freely and prevent overheating.

Make sure that no objects or liquids enter into the DVD recorder. Do not place vases or the like on the DVD recorder. If you spill liquid into the recorder, immediately disconnect it from the power supply and call after-sales service for advice.

Keep the DVD recorder away from radiators and other heat sources and protect it from direct sunlight.

Do not place any combustible objects on the device (candles, etc.).

Important instructions for the HDD

The built-in HDD of this DVD recorder is sensitive to shocks, temperature fluctuations, and vibrations. Please observe the following precautions:

- Avoid shocks or vibrations
- Do not cover the ventilation openings of the cooling fan
- Do not operate the device under high temperatures, and do not expose it to temperature fluctuations
- Do not pull the mains plug from the wall outlet before the device is switched off using **STANDBY** (b).
- Before bringing the device to a workshop for repair, store all important data of the HDD on a DVD+RW/+R. See 'The archive function'.

The workshop will not assume any liability for the loss of the stored data.

 Philips will not assume any liability for damage or loss of stored data.

Symbols used in these operating instructions

The following symbols will facilitate the use of these operating instructions.

- 1 Step(s) for carrying out an operation.
 - Another possible operating step that is not absolutely necessary.
 - → Reaction of the device
- When only one operation step is necessary

You will find additional information in this section.

Cleaning the discs

Some malfunctions (frozen or distorted picture and broken sound for example) may be due to dirt on the disc. To avoid such problems, you should clean your discs regularly.

- Dirty discs should be cleaned with a soft cloth. Always wipe from the middle to the edge.
- Do not use any solvents such as benzine, thinners, commercially available cleaning agents, or antistatic sprays designed for vinyl records.

Can I use a CD lens cleaner in the DVD recorder?

Since the optical unit (laser) of the DVD recorder operates at a higher power level than the ones in normal DVD and CD players, such CD lens cleaner discs may actually damage the optical unit (laser).

Therefore, refrain from using a CD lens cleaner disc!

Special functions of your DVD recorder

Your PhilipsDVD recorder has a number of special functions to make it easier to use and to enhance your enjoyment.



You can operate the main functions on your television using your DVD-Recorder recorder remote control, even if your television is not a Philips.



You can upgrade the software of your DVD-Recorder with a CD-ROM. On the web site http://www.p4c.philips.com under the model number 'HDRW 720/00-02' you will find the data and the upgrade information.

With this function you can align the sequence of the TV channels from the DVD-Recorder with that from yor TV.

With this function the recording on the DVD-Recorder can be controlled via the scart socket. You can use this function if you have a satellite receiver that can control other devices via a scart cable and has a programming function (timer). For more information, consult the instruction manual of your satellite receiver.

Direct Record

At the touch of a button your DVD recorder, even though it is switched off, will check which channel is currently playing on your television and record it.



This connector is also known as a 'FireWire' or 'IEEE 1394'. This connector is used to transmit wide digital broadband signals that are used for digital video camcorders. Audio and video signals are transmitted using a cable. In addition to DV and Hi8 camcorders, PCs with digital video output can also be connected to the digital input.



Recording

This screen tells you what's on the disc. Each index screen represents a recording. On the right hand side of the screen you can also see a disc indicator that shows the position and length of the current recording on the disc in a graphic format.



This function enables you to simply delete unwanted scenes. The relevant scenes are marked and skipped as required. If you store (archive) such titles on a DVD+RW/+R you can decide if you want to store the original title (with the hidden scenes) or the edited title (without the hidden scenes).



MP3 CDs can be played on this machine.

MP3 files are highly compressed music files. The data is compressed to 1/10 of the volume of the original audio material using a special process. This means that 10 hours of music can be stored on a single CD.



Using your DVD recorder you can record from an RGB source such as a satellite receiver using a SCART input ($EXT2 \ AUX-I/O \$ socket). Video signals for the colours R(Red), G(Green) and B(Blue) are transmitted via separate channels. This reduces the interference that occurs with standard video cables.





The Philips DVD recorder can play back pre-recorded DVDs and CDs. DVDs recorded using this DVD recorder can be played back on current and future DVD players.



Dolby Digital is a standard developed by Dolby Laboratories for transmitting from 1 to 5 full-range channels as well as a low frequency (.1) channel for a total of 5.1 discrete channels. The loudspeakers are arranged front left, front middle, front right, rear left and rear right. This system is currently the most common system and is used in cinemas.

With this DVD recorder each soundtrack in 2-channel Dolby Digital is recorded onto a DVD+RW/+R.

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.



This product contains copy protection technology, which is protected by US Patent Nos. 4631603, 4577216, 4819098 and 4907.093 and other intellectual property rights. Use of this copy protection technology from Macrovision Corporation requires the approval of Macrovision. It is intended exclusively for home use and other limited pay-per-view applications, unless Macrovision approves some other use in writing. Modifications to the equipment, removal of components and reverse engineering are prohibited.



Simple programming system for DVD recorders. Simply enter the programming number associated with your television programme. You will find this number in your favourite listings magazine.



The **GUIDE Plus+® System** gives you an on-screen listing of what's on TV. It also lets you program your DVD recorder by selecting the show you want to record from the list on your screen.

You simply enter your local post code during set up and you can see the next 7 days or what's on right now or even what's on in a favourite category such as sports or movies. Click with your remote on the show you'd like to see or schedule. No more hassles programming your DVD recorder! The guide information is sent together with your TV signal so there's nothing to load or buy. The service is free!

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Introduction

Enter the serial number here. You will need it for service queries or if your machine is stolen. The serial number (PROD. NO.) is printed on the type plate at the back or bottom.



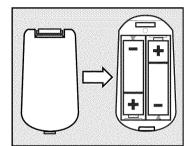


This product complies with the requirements of the following directives and guidelines: 73/23/EWG (Low voltage directive) + 89/336/EWG (EMV-Directive) + 93/68 EWG (CE-Marking). This manual was in consideration of IEC 62079

Preparing the remote control for operation

The remote control and its batteries are packed separately in the original DVD recorder packaging. You must install the batteries in the remote control before use - described in the following section.

1 Take the remote control and the enclosed batteries (2 batteries).



2 Open the battery compartment, insert the batteries as shown and then close the battery compartment.

The remote control is now ready to use. Its range is approximately 5 to 10 meters.

'Aim' correctly

Aim the remote control at the DVD recorder and not at the TV set.

Using your DVD-Recorder remote control with your TV set

With the enclosed multicode remote control you can control the main functions of your TV set. To do this, you must first enter a code number that corresponds to the make of your TV set.

You will find a summary of all available remote control codes on the

You will find a summary of all available remote control codes on the last page of this manual.

- 1 Hold down the STANDBY & button.
- 2 Using the number buttons 0..9, enter the code number that corresponds to the make (manufacturer) of your TV set.
- When you have entered the code number check that, the TV set will responds to the TV VOLUME or TV VOLUME + buttons.

× My TV set will not react

- Also try to enter the other code numbers or that of other manufacturers.
- ✓ In some cases, it is possible that your TV set will not react to the selected code numbers. If this is the case, you unfortunately cannot use this function.

* How can I reset the code?

✓ Enter the number 000.

If you remove the batteries, the selected code will be stored for about 5 minutes before resetted to 000.

4 You can select one of the following functions:

TV VOLUME + increase the TV volume
TV VOLUME - decrease the TV volume

For the following functions you need to hold down the •

TV button (on the left side) and then select the function you need with the appropriate button.

STANDBY [⇔] switch off the TV set

CHANNEL + next programme number

CHANNEL - previous programme number

Additionally on Philips TV-sets:

T/C switch Teletext (TXT) on/off
TIMER ⊕ Clock display on the screen on/off

RETURN To return to the previous menu step

SYSTEM MENU Call up the System Menu from the TV

▼ , ▲ In the menus cursor up/down◀ , ▶ In the menus cursor left/right

OK Confirm functions or settings

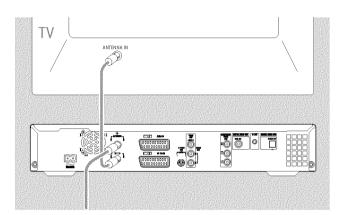
Colour buttons Colour buttons for special functions

TUNER Switchng the TV from the external sockets to the internal tuner (TV channels).

Connecting to the aerial

To receive TV programmes you have to connect the DVD-recorder to the aerial or the cable network.

- 1 Switch off your TV set.
- 2 Remove the aerial cable plug from your TV set. Insert it into the ANTENNA IN socket at the back of the DVD recorder.
- 3 Insert one end of the supplied aerial cable into the TV OUT socket at the back of the DVD recorder and the other end into the aerial input socket at the back of the TV set.



Connecting to the TV

Choose from the following connections:

Connection with scart cable

Connection with S-videocable

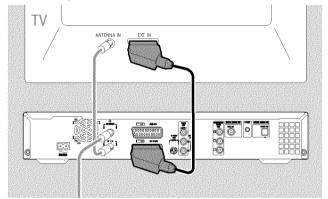
Connection with Video (CVBS) cable

Connection with the aerial cable only

Connection with scart cable

The scart or Euro AV cable serves as the universal connector for picture, sound and control signals. With this type of connection, there is practically no loss of quality in picture or sound transmission.

1 Plug a scart cable into the scart socket EXT1 TO TV-I/O at the back of the DVD recorder and the scart socket for the DVD recorder at the back of the TV set (see TV set operating instructions).



Several scart sockets on the TV?

Select the scart socket that is suitable for both video output and for video input.

Selection menu for the scart socket?

On some TV sets select 'VCR' as the source for this scart socket. Read your instruction manual for your TV set for further information.

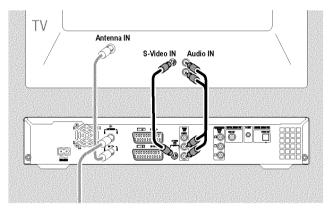
• Read the next chapter 'Connecting additional devices' on how to connect additional devices (satellite receivers, videorecorders,...) to the input-/output sockets.

Then, read the chapter on 'Connecting to the mains'.

Connection with an S-Video(Y/C)cable

This connecting cable, also known as the SVHS cable, is used to transmit the brightness signal (Y signal) and colour signal (C signal) separately. This mini DIN socket/plug is also called a Hosiden socket/plug.

- Insert one end of an S-Video(SVHS) cable into the S-VIDEO OUT (Y/C) socket at the back of the DVD recorder and the other end into the S-Video (SVHS) input socket on the TV set (usually labelled 'S-Video in' or 'SVHS in'. See TV operating instructions).
- 2 Insert one end of an audio (Cinch) cable into the red/white Cinch socket AUDIO OUT L/R at the back of the DVD recorder and the other end into the audio input socket (usually red/white) on the TV set (usually labelled 'Audio in' or 'AV in'. See TV operating instructions).



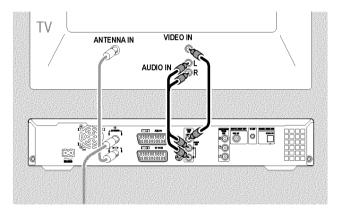
• Read the next chapter 'Connecting additional devices' on how to connect additional devices (satellite receivers, videorecorders,...) to the input-/output sockets.

Then, read the chapter on 'Connecting to the mains'.

Connection with video (CVBS) cable

This cable, usually with yellow Cinch connectors, is used for transmitting the Composite Video signal (FBAS, CVBS). In this method of transmission the colour signal and the brightness signal are transmitted on the same cable. In certain circumstances, this can lead to slight problems with the picture, such as 'Moiré' patterns.

- 1 Insert one end of a video (CVBS) cable into the yellow Cinch socket VIDEO OUT (CVBS) at the back of the DVD recorder and the other end into the video input socket (usually yellow) on the TV set (usually labelled 'Video in' or 'AV in'. See TV operating instructions).
- 2 Insert one end of an audio (Cinch) cable into the red/white Cinch socket AUDIO OUT L/R at the back of the DVD recorder and the other end into the audio input socket (usually red/white) on the TV set (usually labelled 'Audio in' or 'AV in'. See TV operating instructions).



• Read the next chapter 'Connecting additional devices' on how to connect additional devices (satellite receivers, videorecorders,...) to the input-/output sockets.

Then, read the chapter on 'Connecting to the mains'.

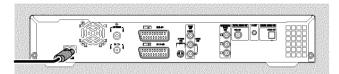
Connection with the aerial cable only

To connect this DVD-Recorder to a TV set without external Audio/Video input sockets, you need a modulator. With the modulator the audio/video signal is converted in an UHF-channel. This signal can be received and stored on the TV as a TV-station.

Connecting to the mains

Always check if the local mains voltage matches the voltage range printed on the type plate at the back or bottom of the DVD-recorder. If not consult your dealer or the customer support from your country.

- 1 Switch on the TV set.
- 2 Insert one end of the supplied mains cable into the mains socket
 MAINS at the back of the DVD recorder and the other end into the wall socket.



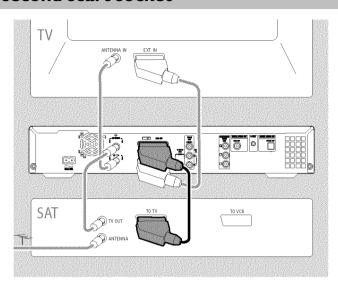
→ The most important features of the DVD recorder will appear in scrolling text on the display.

After the first installation is completed this function will be switched off. How you switch on this function again, read in the chapter 'User preferences' in the section 'standby'.

Then, read the paragraph on 'Initial installation' in 'Installing your DVD recorder'.

Connecting additional devices

Connecting additional devices to the second scart socket



You can connect additional devices such as decoders, satellite receivers, camcorders, etc. to the EXT2 AUX-I/O socket.

When playback is started on this additional device the DVD recorder automatically connects the EXT2 AUX-I/O scart socket with the EXT1 TO TV-I/O scart socket. You will then see the picture from the additional device on your TV set, even if the DVD recorder is switched off.

O The TV/HDD button on the remote control allows you to switch between playback through the EXT2 AUX-I/O scart socket and playback from the DVD recorder.

Connecting a video recorder, DVD player.

You can also connect a video recorder or a DVD player to the **EXT2 AUX-I/O** input socket.

The DVD recorder must be connected **directly** to the TV set (**EXT1 TO TV-I/O** socket directly to the TV set). If there is a video recorder in between the picture quality may be poor because of the copy protection system built into the DVD recorder.

- O If you already have an external receiver (satellite receiver, set-top box, cable TV box) connected to this socket, you can connect the video recorder to the 'VCR', 'TO VCR', ...socket of the external receiver.
- O You can also use the front sockets S-VIDEO (CAM1), VIDEO (CAM1) and the L AUDIO R (CAM1) audio sockets.

For more information read the chapter 'Recording on the HDD'.

Connecting an external receiver

- 1 Connect the **scart socket** of the receiver (satellite receiver, set-top box, cable TV box,...) provided for the TV set (usually labelled 'TV', 'TO TV',...) with the **EXT2 AUX-I/O** socket of the DVD recorder.
 - O If your external receiver offers several options for the signal available at the 'TV', 'TO TV',... socket, choose the 'RGB' setting.

Why can't I use the 'VCR', 'TO VCR',... socket?

In order to achieve the best possible picture quality, you must use the RGB (red-green-blue) signal of the receiver. As a rule, this signal is available at the 'TV', 'TO TV',... socket. The DVD recorder transfers the signal to the **EXT1 TO TV-I/O** socket.

Some receivers only provide a 'Video (CVBS/FBAS)' signal at the 'VCR', 'TO VCR'...socket.

If you are satisfied with the picture quality of the 'VCR', 'TO VCR',... socket, you can also use this socket.

Read the instruction manual of the receiver which signals are available at the sockets.

Connecting additional receivers

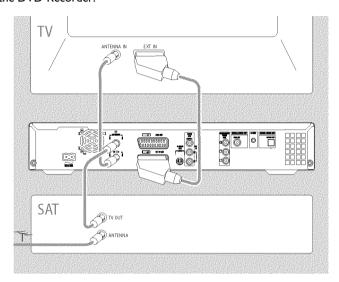
For additional receivers, you can also use the EXT1 TO TV-I/O socket (if the TV set is connected to the COMPONENT VIDEO OUT sockets).

Connecting additional devices

Connecting additional devices only via aerial cable

If you want to connect additional devices (e.g. satellite receiver...) only via aerial cable, please observe the following:

The DVD-Recorder must be connected directly to the TV set. If there is a video recorder or an additional device in between, the picture quality may be poor because of the copy protection system built into the DVD-Recorder.



The additional device (satellite receiver) must be connected **before** the DVD recorder (additional device - DVD recorder - TV set). Only the TV set must be connected to the **TV OUT** socket.

If there is interference in the picture when the additional device is switched on, a TV broadcaster may be transmitting on the same channel or a channel very close to that of the additional device. (e.g.: TV broadcaster on channel 45, additional device (satellite receiver) also on channel 45). In this case, change the channel of the additional device (satellite receiver). Consult the instruction manual of the additional device.

You must also store this channel on the DVD recorder to be able to record TV programmes from the additional device (satellite receiver).

Switch on the additional device during the installation of the DVD recorder. During the automatic channel search, the channel on which the additional device is transmitting will be stored as a TV channel.

Connect camcorder to the front sockets

To copy camcorder recordings, you can use the front sockets. These sockets are located behind the flap on the right hand side.

Recordings from the front sockets were stored on the HDD to make editing easy. Then you can transfer (archive) them on a DVD+RW/+R.

Digital (DV) input socket

If you have a DV or Digital 8 camcorder, connect the **DV IN** (**CAM2**) input of the DVD recorder to the appropriate DV output on the camcorder.

Choose '[AM2' as a programme number for this input.

During recording on the HDD or a DVD+RW/+R the original recording date and time are stored as DVD subtitles.

On playback, this data can be displayed on the TV screen by using the

'.....' function (Subtitle).

S-video input socket

If you have a Hi8 or S-VHS(C) camcorder, connect the **S-VIDEO** (**CAM1**) input of the DVD recorder to the appropriate S-VHS output on the camcorder.

You must also connect the audio input L AUDIO R (CAM1) on the DVD recorder to the audio output on the camcorder.

Choose '[[] 1 as a programme number for this input.

Video (CVBS) input socket

If you have a camcorder that only has a single video output (Composite Video, CVBS), connect the **VIDEO** (CAM1) input on the DVD recorder to the appropriate output on the camcorder.

You must also connect the audio input **L AUDIO R (CAM1)** on the DVD recorder to the audio output on the camcorder.

Choose '[AM 1' as a programme number for this input.

Connecting audio devices to the analogue audio sockets

Two analogue audio sockets **AUDIO OUT L/R** (audio signal output left/right) are located at the back of the DVD recorder.

These can be used to connect the following:

- •) a receiver with Dolby Surround Pro Logic
- •) a receiver with two-channel analogue stereo

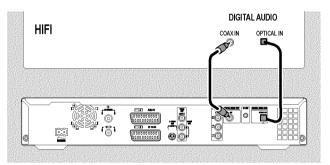
Can I use the 'Phono' input on my amplifier?

This socket (input) on the amplifier is designed only for a record player without preamplifiers. Do **not** use this input for connecting the DVD recorder.

The DVD recorder or the amplifier may be damaged as a result.

Connecting audio devices to the digital audio sockets

At the back of the DVD recorder there are two digital audio output sockets **OPTICAL OUT** for an optical cable and **COAX OUT** for a coaxial cable (Cinch cable).



These can be used to connect the following:

- •) an A/V receiver or an A/V amplifier with a digital multi-channel sound decoder
- •) a receiver with two-channel digital stereo (PCM)

Digital multi-channel sound

Digital multi-channel sound offers the best possible sound quality. You will need a multi-channel A/V receiver or amplifier that supports at least one of the audio formats of the DVD recorder (MPEG2 and Dolby Digital).

Consult the operating instructions for your receiver to find out which audio formats it supports.

× All I can hear from my loudspeakers is a loud distorted noise

✓ The receiver is not compatible with the digital audio format of the DVD recorder. The audio format of the DVD disc is displayed in the status window when you switch to another language. Playback in six-channel digital surround sound is only possible if the receiver has a digital multi-channel sound decoder.

Installation

Initial installation

After successfully connecting your DVD recorder to the TV set and other additional devices as described in the previous chapters, this chapter will show you how to start the initial installation. The DVD recorder automatically seeks and stores all available TV channels.

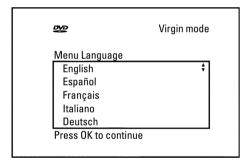
Switching on additional devices

If you have connected additional devices such as a satellite receiver to the aerial cable, switch them on. The automatic channel search will recognise it and save it. Please observe that you must switch on a "test signal" for some additional devices.

No aerial connected

Even if you only want to use the DVD recorder to play back or have only connected a satellite receiver, you must still complete the initial installation. This is necessary so that the basic settings are stored correctly. Once initial installation is complete you can use the DVD recorder as normal.

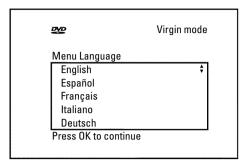
- 1 Press STANDBY-ON () on the front of the DVD-recorder
 - → 'PHILIP5' and then '15 TV DNP' will appear on the display.
 - → If the connection was properly made and your TV was automatically switched to the programme number for the scart socket, e.g. 'EXT', '0', 'AV', you will see the following picture:



× My screen is empty.

- Depending on the initialisation procedure it can take some time before the picture appears. Please press no button in the meantime.
- If the TV set does not automatically switch to the scart socket programme number, manually change to the corresponding programme number on your TV set (see your TV's operating instructions).
- ✓ Check that the scart cable is connected from the TV set to the
 EXT1 TO TV-I/O socket on the DVD recorder. The EXT2
 AUX-I/O socket is intended only for additional devices.

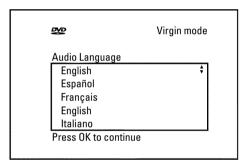
2 Select the desired language for the on-screen menu by pressing



What is an on-screen menu?

The multi-language on-screen menu takes the mystery out of using your new DVD recorder. All settings and/or functions are displayed on your TV screen in the relevant language.

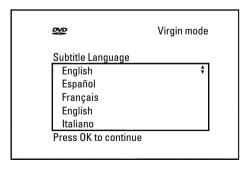
- 3 Confirm with **OK**.
- 4 Select the desired audio language using ∇ or \triangle .



What is an audio language?

The DVD will play the sound in the language you select, provided this language is available on the disc. If it is not available on the disc the first language on the DVD will be used instead. The DVD Video Disc menu, if available, will also be displayed in the language you select.

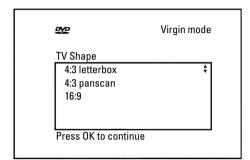
- **5** Confirm with **OK**.
- 6 Select the desired language for the subtitles by pressing ▼ or ▲ .



What is the subtitle language?

The subtitles will be displayed in the language you select, provided this language is available on the disc. If it is not available on the disc the fist language on the DVD will be used instead.

- 7 Confirm with **OK**.
- 8 Select the desired screen format position using ∇ or \triangle .



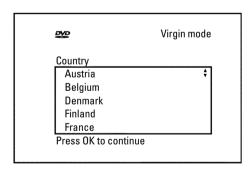
O '4:3 letterbox'

for a 'wide-screen' (cinema format) picture with black bars at the top and bottom.

O '4:3 panscan'

for a full-height picture with the sides trimmed.

- O '16:9' for a wide-screen TV set (screen edge ratio 16:9)
- 9 Confirm with **OK**.
- lacktriangledown Select the country of your residence with lacktriangledown or lacktriangledown .
 - O If your country does not appear, select 'Other'.



Why do I have to set the country?

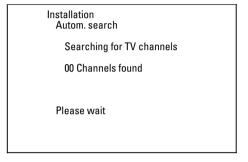
To call up the specific settings for the respective country, you must first install the country.

After the first installation you can set the country in the 'Setup' of the GUIDE Plus+® System only.

- Confirm with OK.
 - → A screen appers with a message about the connection of the

It can take some time before this screen appears. Please press **no button** in the meantime.

- **12** After you connect the aerial (or cable TV, satellite receiver, etc.) to the DVD recorder, press **OK**.
 - → The automatic TV channel search starts.

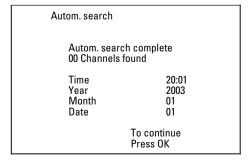


→ '₩₹! I' will appear on the display.

Wait until all available TV channels have been found. This can take several minutes.

× No TV-Stations found yet?

- ✓ Select channel I on the TV set. Can you see the stored TV channel
 on the TV set?
 - If not, check the cable connection from the aerial (aerial socket) to the DVD recorder and to the TV set.
- ✓ Please have patience.
 - The DVD recorder searches the entire frequency range in order to find and save the largest possible number of TV channels.
- ✓ If you have not connected an aerial, go through all the basic settings right to the end and then, if you wish, start the automatic search (see 'Automatic TV station search').
- → When the automatic TV channel search is complete, 'Autom. search complete' will appear on the TV screen along with the number of TV channels found.
- → 'Time', 'Year', 'Month', 'Date' will then appear on the TV screen. It can take some time before this screen appears. Please press no button in the meantime.



Installation

- (3) Check the displayed settings for 'Time', 'Year', 'Month' and 'Date'
 - O If required, change the data with the number buttons 0..9 on your remote control.
 - **O** Select the line with \blacktriangle or \blacktriangledown .
- 14 If all informations are correct, save by pressing OK .
 - → 'Dealer demo' appears on the screen.
 - O Select 'Yes' and confirm with OK if you want to see a demonstration of the function of the DVD-Recorder. Playback starts automatically.

The demontration movie is stored for each language as a title in the 'Media Browser'. If you need additional capacity on the HDD you can delete the demonstration as you delete a title (recording). Read therefor the section 'Delete titles/recordings from the HDD' in the chapter 'Playback from the HDD'.

 Select 'No' and confirm with OK if you do not want to see the demonstration movie automatically.

The initial installation is now complete.

How to modify the channel settings or the time/date settings you will red on the following chapter.

- × Sound may be distorted on some TV channels.
- ✓ If the sound is distorted on any of the stored TV channels or if there is no sound at all, the wrong TV system may have been stored for the TV channel. Read 'Manual TV channel search' for information on how to change the TV system.

Using a satellite receiver

TV channels from a satellite receiver (connected to scart socket **EXT2 AUX-I/O**) are received on the DVD recorder on programme number 'FXT2'

If necessary, use the **TUNER** button to switch to the internal tuner. Select programme number 'EXT1' with 0 on the remote control and then select programme number 'EXT2' with CHANNEL - . You should select the TV channels to be received by the satellite receiver directly on the receiver itself.

Allocating a decoder

Some TV channels send coded TV signals that can only be viewed properly with a purchased or rented decoder. You can connect such a decoder (descrambler) to your DVD recorder. The following function automatically activates the connected decoder for the TV channel you want to watch.

Preparation:

- •) The TV set is switched on, and if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- 1 Use the CHANNEL + and CHANNEL buttons or the number buttons 0..9 on the remote control to select the TV channel for which you want to use the decoder.
 - O If necessary, use the TUNER button to switch to the internal tuner.
- 2 Press the BROWSER HDD button and then the SYSTEM MENU button on the remote control.
 - → The 'SYSTEM MENU' appears.
- 3 Select 'Set up' using ▼.
- 4 Press ► to select 'System'.
- **5** Select the line '*Installation*' using ▼ and confirm with ▶ .
 - → A message appears on the screen that this setting will flush the 'Time Shift Buffer'.
 - O If the 'Time Shift Buffer' contains important recordings, save them with the REC/OTR button first. Read additional information to the 'Time Shift Buffer' in the chapter 'The Time Shift Buffer'.
- 6 Select 'Yes' with ◀ and confirm with OK.
 - If the message window was closed, confirm the line with
 again.
- **7** Select '*Manual search*' using ∇ or \triangle and confirm with \triangleright .

Installation
Manual search

Channel/freq. CH
Entry/search 01
Programme number 01
TV channel name BBC1
Decoder Off
TV system PAL-BG
NICAM On
Fine tuning 0

To store
Press OK

- 8 Select 'Decoder' using ▼ or ▲ .
- 9 Select 'On' with ▶ .
 - O To switch off the decoder use ▶ to select 'Off (Decoder switched off).
- 10 Confirm with OK.

11 To end, press SYSTEM MENU.

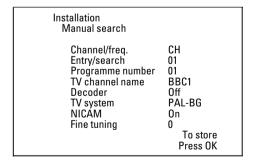
Your decoder has now been allocated to this TV channel.

Manual TV channel search

In some cases, not all of the available TV channels may have been found and stored during initial installation. In this case, you will need to search for and store the missing or coded TV channels manually.

Preparation:

- •) The TV set is switched on, and if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- 1 Press the DISC MENU button and then the SYSTEM MENU button on the remote control.
 - → The 'SYSTEM MENU' appears.
- 2 Select 'Set up' using ▼.
- 3 Press ▶ to select 'System'.
- **4** Select the line '*Installation*' using ▼ and confirm with ▶ .
 - → A message appears on the screen that this setting will flush the 'Time Shift Buffer'.
 - O If the 'Time Shift Buffer' contains important recordings, save them with the REC/OTR button first. Read additional information to the 'Time Shift Buffer' in the chapter 'The Time Shift Buffer'.
- 5 Select 'Yes' with ◀ and confirm with OK.
 - If the message window was closed, confirm the line with▶ again.
- **6** Select '*Manual search*' using ∇ or \triangle and confirm with \triangleright .



- 7 In 'Channel/freq.', select the desired display using ▶ . 'Freq.'(Frequency), 'CH'(Channel), 'S-CH'(Special/hyperband channel)
- 8 In 'Entry/search', enter the frequency or channel of the TV station using the number buttons 0..9.
 - O Press ▶ in the line 'Entry/search' to start the automatic search.
 - A changing channel number/frequency number will appear on the TV screen.

Continue the automatic search until you have found the TV channel you are looking for.

- 9 Using ◀ or ▶ in '*Programme number*', select the programme number you want to use for the TV channel, e.g. '01'.
- 10 Press OK to store the TV channel.
- To search for other TV channels, begin again at 8 .
 - O Change the name of a TV channel:
 - In 'TV channel name', press ▶
 - Select the desired character position using ◀ or ▶
 - hange the character at the desired position with lacktriangledown or lacktriangledown .
 - Select the next character position in the same way.
 - Confirm with OK.
 - O Change the TV system of the TV channel:
 - In '*TV system*', use ◀ or ▶ to select the TV system that produces the least distortion of picture and sound.
 - O NICAM
 - If reception is poor and the sound distorted you can turn off NICAM.
 - In 'NICAM', select 'Off' using ▶.
 - O Fine tuning
 - You can try fine tune the TV channel manually with ◀,
 in the line 'Fine tuning'.
- 12 To end, press SYSTEM MENU.

Sorting TV channels automatically (Follow TV)

This function changes the order of the TV channels stored in your DVD recorder to match the order on the TV set.

This only works if the DVD recorder (**EXT1 TO TV-I/O** socket) and the TV set **are connected with a scart cable**.

Preparation:

- •) The TV set is switched on, and if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- 1 Press the BROWSER HDD and then the SYSTEM MENU button on the remote control.
 - → The 'SYSTEM MENU' appears.
- 2 Select 'Set up' using ▼.
- 3 Press ▶ to select 'System'.
- 4 Select the line 'Installation' using ▼ and confirm with ▶ .
 - → A message appears on the screen that this setting will flush the 'Time Shift Buffer'.
 - O If the 'Time Shift Buffer' contains important recordings, save them with the REC/OTR button first. Read additional information to the 'Time Shift Buffer' in the chapter 'The Time Shift Buffer'.
- 5 Select 'Yes' with ◀ and confirm with OK.
 - If the message window was closed, confirm the line with ▶ again.
- 6 Select line 'Follow TV' with ▼ or ▲ . and confirm with the button.
- **7** Confirm the message on the screen with **OK**.
 - → 'TV' [] " will appear in the DVD recorder display.

TV 01

- 8 Select programme number 'I' on the TV set.
- × I cannot switch my TV set to programme number 'I'
- ✓ If you have connected additional devices to the EXT2 AUX-I/O socket, please disconnect these devices. Other connected devices may have switched the TV set to the programme number of the scart socket.
- 9 Confirm with **OK** on the DVD recorder remote control.
 - → 'WFI I' will appear in the display.
 - → The DVD recorder compares the TV channels on the TV set and the DVD recorder.

 If the DVD recorder finds the same TV channel as on the TV.

If the DVD recorder finds the same TV channel as on the TV set it stores it at 'P01'.

- × 'N□TV' will appear in the display.
 - The DVD recorder is not receiving a video signal from the TV set.
- ✓ Chech the connectors at both ends of the scart cable.
- ✓ Check your TV's operating instructions to see which scart socket is used for video signals.
- ✓ If the problem persists, you won't be able to use this feature. Please read 'Sorting and deleting TV channels manually'.
- 10 Wait until for example ' \mathcal{W} \mathbb{G}^2 ' appears in the display.

TV DZ

- Select the next programme number on the TV set, e.g. '2'.
- 12 Confirm with **OK** on the DVD recorder remote control.
 - O If you confirmed the wrong TV channel, you can delete the last allocation with ◀.
- 13 Repeat steps 10 to 12 until you have assigned all the TV channels from your TV set.
- 14 To end, press SYSTEM MENU.
- * 'Switch off recorder, new preset' appears on the screen
- ✓ In order to transfer the new TV channel order to the GUIDE Plus+® system, it is necessary to switch off the DVD recorder (**STANDBY** \circlearrowleft). Wait for approx. 4 minutes before you switch the DVD recorder on again.
- ✓ If this message appears after you switch on the DVD recorder, it was not possible to complete the transfer process. Switch off the DVD recorder using STANDBY ().

Automatic TV channel search

If the channel assignments of your cable or satellite TV provider change or if you are reinstalling the DVD recorder, e.g. after moving house, you can start this procedure again. This will replace the stored TV channels with the new ones.

Preparation:

- •) The TV set is switched on, and if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- 1 Press the BROWSER HDD button and then the SYSTEM MENU button on the remote control.
 - → The 'SYSTEM MENU' appears.
- Select 'Set up' using ▼ .
- 3 Press ► to select 'System'.
- **4** Select the line '*Installation*' using lacktriangle and confirm with lacktriangle .
 - A message appears on the screen that this setting will flush the 'Time Shift Buffer'.
 - O If the 'Time Shift Buffer' contains important recordings, save them with the REC/OTR • button first. Read additional information to the 'Time Shift Buffer' in the chapter 'The Time Shift Buffer'.
- 5 Select 'Yes' with ◀ and confirm with OK.
 - O If the message window was closed, confirm the line with again.
- 6 Select 'Autom. search' using ▼ or ▲ .
- **?** Press ▶ .
 - The automatic TV channel search starts. This allows the DVD recorder to save all available TV channels. This procedure may take several minutes.

Installation

Autom. search

Searching for TV channels

00 Channels found

Please wait

- When all the TV channels have been found, 'Autom. search complete' will appear on the TV screen.
- 8 To end, press SYSTEM MENU.

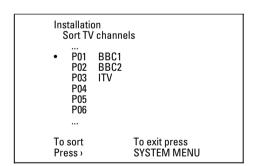
You can read about how to search for a TV channel manually in 'Manual TV channel search'.

Sorting and deleting TV channels manually

With this function you can rearrange the TV channels already stored or to delete TV channels you don't want or those with poor reception.

Preparation

- •) The TV set is switched on, and if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- 1 Press the BROWSER HDD button and then the SYSTEM MENU button on the remote control.
 - → The 'SYSTEM MENU' appears.
- 2 Select 'Set up' using ▼.
- 3 Press ▶ to select 'System'.
- **4** Select the line '*Installation*' using ∇ and confirm with \triangleright .
 - → A message appears on the screen that this setting will flush the 'Time Shift Buffer'.
 - O If the 'Time Shift Buffer' contains important recordings, save them with the REC/OTR ● button first. Read additional information to the 'Time Shift Buffer' in the chapter 'The Time Shift Buffer'.
- 5 Select 'Yes' with ◀ and confirm with OK.
 - If the message window was closed, confirm the line with▶ again.
- 6 Select 'Sort TV channels' using ▼ or ▲ and confirm with ▶ .



- 7 Using ▼ or ▲ select the TV channel that you want to delete or whose order you want to change.
- 8 Confirm with ▶.

O Deleting TV channels

Unwanted channels or those with poor reception can be deleted using the red function button.

- 9 Using ▼ or ▲ , shift the TV channel to the desired position and press the ◀ button.
 - → The DVD recorder will insert the TV channel.
- Repeat steps 7 to 9 until you have resorted/deleted all the TV channels you want.

- 11 To store, press OK.
- 12 To end, press SYSTEM MENU.
 - * 'Switch off recorder, new preset' appears on the screen
 - ✓ In order to transfer the new TV channel order to the GUIDE Plus+® system, it is necessary to switch off the DVD recorder (STANDBY ©). Wait for approx. 4 minutes before you switch the DVD recorder on again.
 - ✓ If this message reappears after you switch on the DVD recorder, it was not possible to complete the transfer process.

 Switch off the DVD recorder using STANDBY ().

Setting the language

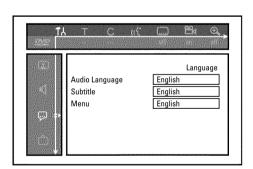
For the basic setting of DVD playback, you can select the language for the subtitles and the audio language.

Please note that with some DVDs the audio language and/or subtitle language can be changed only via the DVD menu.

For bilingual shows, you can also select the sound channel of the TV station via the internal tuner (**TUNER** button) for recording or playback.

Preparation:

- •) The TV set is switched on, and if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- Press the BROWSER HDD button and then the SYSTEM MENU button on the remote control.
 - → The menu bar appears.
- 2 Select 'T\' symbol with ◀ or ▶.
- 3 Select line '- with ▼ or ▲ and confirm with the ▶ button.



- 4 Select the appropriate line and confirm with ▶.
 - O Audio Language

The DVD will play back in the language you have chosen.

O 'Subtitle'

Subtitle language

O 'Menu'

You have the option of setting one of the displayed languages for the on-screen menu (OSD). However, the DVD recorder display will only display English text regardless of this setting.

The language can also be set in the installation menu from the GUIDE Plus+ $\!^{\otimes}$ system.

To activate the new language you must switch the DVD-Recorder off and on again (button **STANDBY** \circlearrowleft).

- **5** Select the appropriate setting using **▼** or **△** and confirm with **OK**.
- 6 To end, press SYSTEM MENU.

Setting the time

If the display shows an incorrect time or '--:--', the time and date must be reset manually.

SMART CLOCK

'SMART CLOCK' automatically sets the time and date using the information transmitted by the TV channel. Normally the TV channel stored at programme number 'P01' is used. In the 'Clock preset' line you can select the programme number (channel name) whose TV channel transmits this information.

If the time/date is not displayed correctly you need to choose the 'Off setting in the 'Clock preset' line and set the date and time manually.

- 1 Press the BROWSER HDD button and then the SYSTEM MENU button on the remote control.
 - → The 'SYSTEM MENU' appears.
- 2 Select 'Set up' using ▼.
- 3 Press ▶ to select 'System'.
- **4** Select the line '*Installation*' using ▼ and confirm with ▶ .
 - → A message appears on the screen that this setting will flush the 'Time Shift Buffer'.
 - O If the 'Time Shift Buffer' contains important recordings, save them with the REC/OTR button first. Read additional information to the 'Time Shift Buffer' in the chapter 'The Time Shift Buffer'.
- 5 Select 'Yes' with ◀ and confirm with OK.
 - If the message window was closed, confirm the line with ▶ again.
- **6** Select '*Time/Date*' using ∇ or \triangle and confirm with \triangleright .

Installation Time/Date			
Time Year Month Date Clock preset	20:00 2003 01 01 01		
	To exit press SYSTEM MENU		

- 7 Change the time in 'Time' using the number buttons 0..9 on your remote control.
- 8 Check 'Year', 'Month' and 'Date' in the same way. Select the entry field with the ▼ or ▲ button.

- × Time/date is displayed incorrectly despite manual setting
- ✓ With 'SMART CLOCK', time/date is transferred from the TV channel saved on 'P01' and automatically corrected.

You can either enter another TV channel for transferring the data or disable the function.

In the line 'Clock preset' select the relevant TV channel with

✓ or

. To disable, select 'Off.

- **9** Check the displayed settings and confirm with **OK**.
 - → 'Stored' will appear briefly on the screen.
- To end, press SYSTEM MENU.

Connection using a component video (Y Pb Pr/YUV) cable (no progressive scan)

Component video (Y Pb Pr) is the highest quality picture transmission option. This is achieved by dividing the video signal into a luminance signal (Y) and two colour difference signals - red minus luminance (V) and blue minus luminance (U). As a rule, "Cr, Pr" or "R-Y" is used to describe the red difference signal and "Cb, Pb" or "B-Y" the blue difference signal.

These signals are transmitted through separate lines. The connectors of this cable and the corresponding sockets are usually green (luminance, Y), blue (U, Pb, Cb, B-Y), and red (V, Pr, Cr, R-Y).

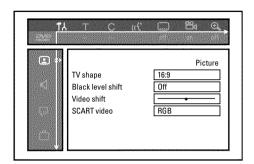
Attention!

If you choose this type of connection, the DVD recorder must already be connected and completely installed (initial installation complete). Switching of the signal to the **COMPONENT VIDEO OUT** sockets is carried out in a menu that is not yet available during the initial installation.

Preparation:

- •) The TV set is switched on, and, if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- 1 Press the **DISC MENU** and then the **SYSTEM MENU** button on the remote control.
 - → The menu bar appears.
- 2 Select 'T从' symbol with ◀ or ▶ .

 \begin{cal} 3 Select the ' $\begin{cal} \blacksquare$ ' symbol using $\begin{cal} \blacktriangledown$ or $\begin{cal} \blacktriangle$ and confirm with $\begin{cal} \blacktriangleright$.

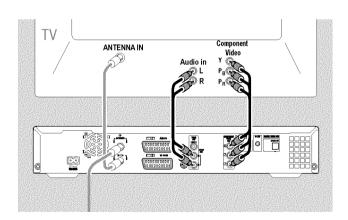


- Select the line 'SCART video' using ▲ or ▼ and confirm with ▶ .
- 5 Select your setting with ▼ or ▲ . If the YPbPr output (YUV signal) is switched on, S-video (Y/C) and video (FBAS/CVBS) signals will not be transmitted simultaneously. The 'RGB' signal is switched off.
 - O 'S-video + YPbPr'
 Component Video (YUV) and S-Video(Y/C).
 GUIDE Plus+® menus only available on YUV ouput sockets.
 - O 'CVBS + YPbPr'
 Component Video (YUV) and Video (FBAS/CVBS).
 GUIDE Plus+® menus only available on YUV ouput sockets.

With all other settings, the signal is switched off at the **COMPONENT VIDEO OUT** sockets. This will also be displayed as information on the screen.

For more information on the other settings, read section 'Picture settings' ('SCART video') in chapter 'User preferences'.

6 Confirm with OK.



Use a component video (Y Pb Pr) cable, connect the three cinch sockets (red, blue, green) **COMPONENT VIDEO OUT** at the back of the DVD recorder with the corresponding three component video (interlaced) input sockets of your TV set, usually labelled 'Component Video Input', 'YUV Input', 'YPbPr', 'YCbCr' or simply 'YUV'.

Warning!

Do not confuse these sockets with the five-component RGB sockets (if available) or the yellow video (CVBS/FBAS) socket and the two audio sockets (red/white). The five-component RGB sockets are only provided for the R-G-B-H-V signals (red, green, blue with horizontal and vertical synchronisation impulse).

Please observe the colour sequence

The colours of the sockets at the DVD recorder and the connectors must match those of the socket colours at the TV set (red-red/blue-blue/green-green). If they don't, the colours of the picture may get mixed up or the picture may not be visible.

- 8 Use an audio (cinch) cable, connect the red/white cinch socket AUDIO OUT L/R at the back of the DVD recorder with the most coloured red/white audio input socket of your TV set (usually labelled 'Audio in' or 'AV in'. See the instruction manual of your TV set.)
- If necessary, switch your TV set to the component video (Interlaced) input sockets. If there is a switch or selection on your TV-set between 'Interlaced' and 'Progressive scan' select 'Interlaced'. 'Progressive scan' will be not supported from this DVD-Recorder.

Also consult the instruction manual of your TV set.

- → The menu of the DVD recorder should now appear on the TV screen. If not, check the cable connections and the settings on your TV set.
- O If necessary store this setting on your TV set.
- 10 End with SYSTEM MENU.

General information

Your DVD Recorder is equipped with the GUIDE Plus+® System. The GUIDE Plus+® System offers a free interactive electronic programme guide that lists all the TV programmes available in your area. You can also use the GUIDE Plus+® System to program your DVD recorder to record your favourite shows.

Press **GUIDE/TV** to see a summary of all the TV programmes currently being shown on the various TV channels. For the summary, you can either display all shows for a particular start time or sorted according to category.

For the GUIDE Plus+® System to operate correctly, it is necessary for the DVD recorder to collect the necessary data. The DVD recorder may take up to 24 hours to do this.

Please note the following:

- •) All the TV channels must already have been installed.
- •) The TV channel that transmits the GUIDE Plus+® system information must be installed.

If you did not find your country in this list, no TV channel will be provided the GUIDE Plus+® system information.

On the internet page http://www.europe.guideplus.com you will find further informations and tips.

Country/City (Language)	TV-channel (aerial)	TV-channel (SAT)
Deutschland	Eurosport	Eurosport Astra 19.2E
Österreich	Eurosport	Eurosport Astra 19.2E, Hotbird 13.0E
Schweiz (Deutsch)	Eurosport	Eurosport Astra 19.2E
United Kingdom	ITV	Eurosport Astra 28.2E
France	Canal+	
España	Tele 5	
Nederland	Music Factory (TMF) / Eurosport	TMF Astra 19.2E Eurosp. Hotbird 13.0E
- Eindhoven	Music Factory (TMF)	Music Factory (TMF) Astra 19.2E
- Rotterdam	Music Factory (TMF)	Music Factory (TMF) Astra 19.2E
- Amsterdam	Music Factory (TMF)	Music Factory (TMF) Astra 19.2E
België (Flemmish)	Music Factory (TMF)	Music Factory (TMF) Astra 19.2E

- •)The time and date must have been set.
- •)The country and the local post code must have been set in the GUIDE Plus+® system.
- •)The aerial/cable network must be connected; it must be possible to receive TV channels.
- •)The DVD recorder must be connected to the mains
- •)The DVD recorder must be switched to standby with the **STANDBY** \circlearrowleft button.
- •) If you have connected an external receiver (satellite receiver, set-top box, cable TV box,...), it must be switched on and tuned to the right TV channel (see table above).

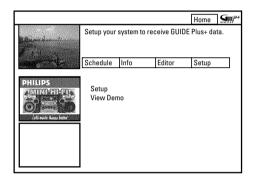
Setting up the GUIDE Plus+® System

Below we'll tell you how to set up the GUIDE Plus+® System to suit your own particular needs and how to install the external receiver (satellite receiver,) if you have one.

If the GUIDE Plus+® system has not been installed yet, the 'Setup' screen will appear and you can start with the installation right now.

- 1 Switch on the TV set. If required, select the programme number for the DVD recorder.
- 2 Press the GUIDE/TV button on the remote control.
 - → The 'Grid' screen will appear.

 If the GUIDE Plus+® system has not been installed yet, the 'Setup' screen will appear and you can start with the installation right now.
 - O If an 'Installlation-screen' appears, select the settings described in the next chapter and follow the instructions on the screen.
- **3** Press ▲ . Select the setting 'Setup' with ▶ . This setting is located on the second menu page.



- Select one of the following options using ▼ or ▲ and confirm with OK.
 - O 'Setup

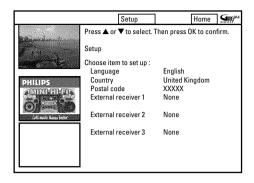
Installation of the GUIDE Plus+® system. Continue reading in the next chapter.

O 'View Demo'

At this point you will be introduced to the functions of the GUIDE Plus+® system. This will be done using stored demo data.

If you start the demo, programmed recordings can be deleted. By pressing **OK** during the presentation, you can proceed directly to the installation of the GUIDE Plus+® system. Read the next section.

'Setup'



Check the data displayed on the screen. If necessary, you can change these. To do so, select the corresponding line with ∇ or \triangle .

'Language'

Here you can change the language for the on-screen menu.

- 1 Press OK.
- 2 Select the desired language using ▼ or ▲ and confirm with
- 3 Press OK to return to the 'Setup' screen.

'Country'

Select the country you currently live from the list. The DVD recorder needs this information to load the right channel list.

- 1 Press OK.
- 2 Select the country you live in using ▼ or ▲ and confirm with OK.
- 3 Press OK to return to the 'Setup' screen.

'Postal code'

In order to adjust the GUIDE Plus+® system correctly, it is necessary to know your current location with the TV channels available. Using the local post code and the country, the DVD recorder can automatically make the settings.

- 1 Press OK.
- 2 Choose the entry position using ▶ , ◀ . Select the local post code of your location using ▲ , ▼ , or the number buttons 0..9 .
 - **O** Depending on the country you select, you can also enter letters using ∇ or \triangle .
 - × I cannot enter a local post code

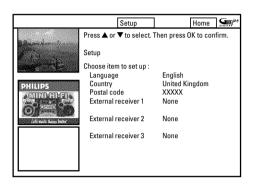
✓ You have selected a country in which none of the channels transmits GUIDE Plus+® data yet.

- 3 Confirm the local post code with OK.
- 4 Press OK to return to the 'Setup' screen.

'External receiver 1'

- How you install the external receiver you will read in the next chapter.
- If you have no external receiver connected, read the section 'Finalise set-up'.

Installation of the 'External receiver 1'



If you have connected an external receiver (satellite receiver, set-top box, cable TV box), you must also install it in the GUIDE Plus+® system. TV programmes (TV channels) that you can only watch via the receiver can also be displayed in the GUIDE Plus+® system and be programmed for recording.

You can connect up to three external receivers to the DVD-Recorder.

- Select with ▼ or ▲ in the 'Setup'screen the line 'External receiver 1' and confirm with OK.
- 2 Read the information on the screen and confirm with OK.
- 3 Select the type of the external receiver. This setting serves to preselect the type used.

Which types can I choose?

This selection depends on the country and the GUIDE Plus+® system provider. Therefore, some types may have no function.

'Cable': Cable receiver, cable box.

'Satellite': Analogue or digital satellite receiver.

'Terrestrial': Digital terrestrial decoder box.

'None': No external device connected.

4 Confirm with OK.

If you selected '*None*', there is nothing further you need to do here. Read on in the section entitled 'Continue set-up'.

Otherwise, you should continue here.

- 5 Select your provider from the list.
 - O If you do not have a provider, select 'No provider'
- 6 Confirm with OK.
- 7 Select the brand of your external receiver from the list. If, additionally your provider is printed on your receiver (e.g. Sky,...), you must choose the provider as brand.
 - Depending on the type and provider you selected, a limited selection will appear.

O Browse through the pages of the list using $\blacktriangleright \blacktriangleright \mid$, $\blacktriangleright \blacktriangleleft$.

* My brand is not included in the list

- ✓ Select 'Satellite' and as provider 'No provider'. You will see a list of all stored brands.
- ✓ If you do not find your brand, please proceed as follows:
- Select 'None'. You will find this setting at the end of the list.
- Tune your external receiver to the TV channel which transmits the GUIDE Plus+® data (see table in the section 'General information'). If this TV channel is available at the internal tuner of the DVD-recorder, select this channel.
- Wait till the GUIDE Plus+® data is loaded (24 hours) and search for your brand again.
- The control data of the external receivers are automatically updated (completed) via the GUIDE Plus+® system in few weeks. This is done through the aerial, the cable, or the external receiver. You do not need to bring the device to a service centre.
- If your brand is still missing, note the type and manufacturer of your external receiver and call the customer support service in your country.
 You will find the telephone number on the back of this instruction manual.
- 8 Press OK.
- **9** Select the input socket of the DVD recorder to which the receiver is connected.

* My external receiver is connected only via aerial cable

- Press ►►I to move to the next page.

 Confirm 'Antenna (RF lead)' using OK.
- Enter the channel number under which the external receiver is stored in the DVD recorder. (e.g.: channel number 'P 04'). Use the number buttons 0..9, or ∇ , \triangle , \triangleleft , \triangleright .

If the external receiver is not allocated to a channel number, you must search and store it in the DVD recorder as if it were a new TV channel. Read section 'Search TV channels manually'. Please make sure that the receiver remains switched on during search and, if necessary, switch it on to a 'test signal'.

10 Confirm with OK.

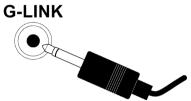
Connecting G-LINK™ transmitter



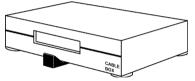
The external receiver (satellite receiver, set-top box, cable TV box) is controlled via the DVD recorder with the G-LINK cable (supplied). This means you can record TV shows that are received only through the external receiver.

Connection of the G-LINK cable enables the GUIDE Plus+® system to show the correct guide listing.

1 Connect the G-LINK cable to the **G-LINK** socket at the back of the DVD recorder.



2 Position the G-LINK transmitter in front of the external receiver so that the control signal (IR signal) can be transmitted and received by the receiver unhindered.



How do I find the right position?

If the position of the remote (IR) receiver is indicated on your external receiver (IR, remote sensor, or such like), place the transmitter about I to I 0 cm in front of it.

If the position is not indicated, proceed as follows:

- Switch off the external receiver.
- Point the remote control at the front of the external receiver.
- Move the remote control slowly along the front while repeatedly pressing the on/off button.
- When the external receiver switches on or off, you've found the receiver.
- Attach the G-LINK transmitter about one to 10 cm in front of it.
- 3 Switch the receiver on and select programme number 02 on the receiver or using its remote control.

My external receiver does not display the programme number

During installation, the external receiver will be switched to a different programme number. If the receiver does not display the programme number, you must check the 'Video window' (left top corner in the GUIDE Plus+® system) to see whether switching has taken place.

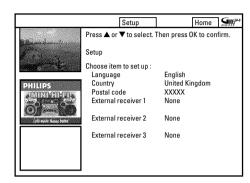
- Select on the DVD-Recorder the socket where the receiver is connected using CHANNEL + , CHANNEL - (e.g. EXT2for EXT2 AUX-I/O)
- Please check the TV show in the 'Video window' in the left top corner of the screen.
- Check whether the picture changes during the next step (**OK** button).
- 4 Read the information on the screen carefully. Confirm with **OK** .
 - → The DVD recorder will now attempt to use the G-Link connection on the external receiver to select a different programme number (e.g. 12). This programme number depends on your external receiver.
- Has the external receiver been switched to the programme number displayed on the screen? If this is the case, select 'YES'. If no switching has taken place, select 'NO'.

My external receiver has not switched to the other programme number.

- Check that the external receiver is connected and switched on.
- Check the connection and position of the G-LINK transmitter.
- For another attempt with a new code of the chosen brand, select 'NO'.
- Confirm with OK on the remote control.
- If the receiver has not switched yet, select 'NO' again and confirm with OK. It may take several attempts for a receiver brand.
 If you return to the setup screen after confirming 'NO', your receiver may not have been installed. Check the connections again.
- -Tune your external receiver to the TV channel which transmits the GUIDE Plus+® data (see table in the section 'General information'). If this TV channel is available at the internal tuner of the DVD-recorder, select this channel.
- Wait till the GUIDE Plus+® data is loaded (24 hours) and try the switch over again.
- The control data of the external receivers are automatically updated (completed) via the GUIDE Plus+® system. This is done through the aerial, the cable, or the external receiver. You do not need to bring the device to a service centre.
- If your receiver still does not switch, note the type and manufacturer of your external receiver and call the customer support service in your country. You will find the telephone number on the back of this instruction manual.
- 6 Your external receiver has now been installed.
- Press **OK** to return to the setup overview.

Want to install additional external receivers When installing additional external receivers, please observe the following: The external receiver which is controlled by the G-LINK transmitter must be below the other additional receivers. The IR(infrared) remote control signal is reflected diagonally upwards and can therefore be used to control additional external receivers which are on top.

Finalise set-up



- 1 Check the settings shown on the screen.

 If the settings are not correct, choose the line in which you want to change the settings and confirm with **OK**.
- 2 Press the green function button to leave the screen.
 - O If you want to view a demonstration of the GUIDE Plus+® system select '*View Demo*' with ▼ and confirm with OK . If you start the demo, programmed recordings can be deleted.
 - O If you do not want to see the demonstration of the GUIDE Plus+® system, end using GUIDE/TV.
- 3 This completes the set-up process for the GUIDE Plus+® system.
- 4 Switch the DVD-recorder to the TV channel which transmits the GUIDE Plus+® data. The right TV-channel for your country you will in the table in the chapter 'The GUIDE Plus+® system' in the section 'General information'.

Leave the DVD recorder switched on during the night to load the GUIDE Plus+® data.

The information will be available in the next 24 hours.

f If data are available check in the 'Editor' screen that the TV channel which transmits the GUIDE Plus+® data is allocated to the right programme number. Change the programme number if necessary.

What must I pay attention to when installing an external receiver for the first time?

- •) The receiver must be switched on.
- •) If you can switch between 'TV' and 'Radio' on the receiver, select 'TV'.
- •) Select the TV channel that transmits the GUIDE Plus+® data on the receiver. You will find the corresponding TV channel for your country in the table in section 'General Information' in chapter 'The GUIDE Plus+System'.
- •) On the DVD recorder, select the programme number of the input socket to which the external receiver is connected:
- 'EXTZ' Scart socket at the back of the DVD recorder EXT2 AUX-I/O

'EXT 1' Scart socket at the back of the DVD recorder **EXT1 TO TV-I/O**

- •) If the external receiver is only connected to the aerial socket, you must select the programme number on the DVD recorder under which the external receiver is stored.
- •) The DVD recorder must be switched on.
- •) If GUIDE Plus+® data were loaded, switch the DVD-Recorder off with the **STANDBY** \circlearrowleft button for approx.10 minutes. During this time, the data will be stored in a memory to prevent them from being erased in case of malfunction (power failure).

You must observe this information only when installing the receiver for the first time. At this point, there is no GUIDE Plus+® data available yet in order to automatically detect the TV channel that delivers the GUIDE Plus+® data.

Using the GUIDE Plus+® System

General

The GUIDE Plus+® System provides you with a free on-screen listing for all the TV channels in your location. You can also use it to control a connected external receiver (satellite receiver, set top box, cable box).

The information of the GUIDE Plus+ $\!^{\otimes}\!$ System is divided in six screen components:

- •) Function buttons (colour panels) along the top of the screen. These correspond to the colour buttons of the remote control
- •) The video window
- •) Programme information or instructions for use
- •) A line for the selection of available GUIDE Plus+® menus
- •) The channel guide with the current listings
- •) Advertising information or instructions on the GUIDE Plus+® system

Calling up the GUIDE Plus+ ® System:

Press GUIDE/TV on the remote control.

Closing the GUIDE Plus+® System:

•) Press **GUIDE/TV** to leave the GUIDE Plus+® System and continue viewing the program you were viewing before you called up the GUIDE Plus+® System.

Using the buttons on the front of the DVD recorder Calling up the GUIDE Plus+® System: **GUIDE** button. Closing the GUIDE Plus+® System: **GUIDE** button.

Confirm the function: **OK** button. Red function button: **OK** button.

Cursor buttons: \mathbf{UP} , \mathbf{DOWN} , \mathbf{LEFT} , \mathbf{RIGHT} .

The navigation in the GUIDE Plus+® System

Press $\,$ GUIDE/TV to view the main menu. Press $\,$ $\,$ to select the menu line. You can select one of the following functions with $\,$ $\,$ or

 \blacktriangleright . Press at the desired function the $\,\blacktriangledown\,$ button for confirmation.

O 'Grid':

Standard GUIDE Plus+® system screen (programme guide)

O 'Search'

TV shows sorted by category (movies, sport, etc.)

O 'Schedule':

Scheduled (pre-programmed) recordings

O 'Info'

Additional special functions in the GUIDE Plus+ $\!^{\rm @}$ system.

O 'Editor':

Display/Change the channel settings for the 'Grid' screen

O 'Setup':

For changing the basic settings. Read further information in the chapter 'Set up the GUIDE Plus+® System'.

Function buttons (colour buttons)

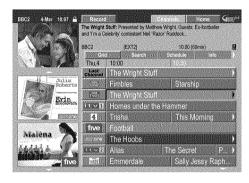
If GUIDE Plus+® information has been loaded, function buttons (colour fields) at the top of the screen indicate that you can perform various actions in the GUIDE Plus+® screen. Red, Green, Yellow, Blue whose function depends on the respective menu. Always check the function (description) in the corresponding colour field before pressing a button.

If no colour buttons are displayed, pressing them will have no effect.

INFO button

An **INFO** button is also available. If additional information is available (symbol i on the screen), you can use this button to retrieve the information

The 'Grid' screen



This list appears when you press the **GUIDE/TV** button. You can view the current listing for all the TV channels from today to the same day next week.

ATTENTION!

If data from the GUIDE Plus+® system is already available after the initial installation, check the allocation of programme numbers to the channels in the '*Editor*' screen.

Read therefore the section 'The 'Editor' screen'.

If the TV-channel that transmits the GUIDE Plus+® data was allocated to the wrong programme number, no further GUIDE Plus+® data can be loaded.

- 1 Press GUIDE/TV . The 'Grid' screen will appear.
 - → In the top left corner the picture of the TV channel appears which was selected before you call up the GUIDE Plus+® system.
- **2** Select the TV channel you require with lacktriangle or lacktriangle .
 - O You can use the number buttons 0..9 to select a TV channel directly.
 - O You can use the CHANNEL + and CHANNEL buttons to scroll a page at a time.

Choosing a TV channel from a listing

- Press the yellow function button.
- An overview of all TV channels appears.
- Select the TV channel you want using ightharpoonup , ightharpoonup , ightharpoonup , ightharpoonup .
- Confirm with OK .

- 3 Use the ◀ or ▶ button to select the show you want.
 - You can hold down ◀ or ▶ to browse faster through the start times.
 - O If you press the button I◀◀ or ▶▶I , you can switch forward or back a day.

<u>I want to call the additional information/advertisement on</u> the left hand side of the screen

Press \blacktriangleleft in the line of the TV channel repeatedly, until the additional information/advertisement on the left hand side of the screen is highlighted. You can toggle between the two sets of information using \blacktriangledown , \blacktriangle .

You can exit these areas with ▶ or with the blue function button.

Function buttons (colour buttons) in the 'Grid' screen

You can use the colour buttons on the remote control to select the following:

'Record' (red button):

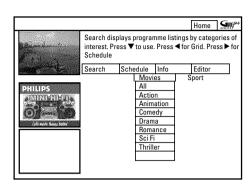
The highlighted show will be programmed for automatic recording. It appears in the 'Schedule' screen.

You can store up to 12 TV shows for recording.

'Home' (blue button):

Return to the current time in the listing ('Grid' screen).

The 'Search' screen



This menu lets you access show listings organised by category. This is an even easier way of searching the show you want to watch. Make your selection from a general category (Movies, Sport, Children's, Series, etc.) and a detailed category (Adventure, Comedy, Drama, etc.)

Colours of the categories:

Purple-Movies

Green-Sport,

Blue-Children's,

Teal-Others,

The Sort service gives you show listings for the next 7 days.

- **1** Select the category with \blacktriangleleft , \blacktriangleright . Confirm with \blacktriangledown . Select the minor category with \blacktriangledown , \blacktriangleleft , \blacktriangleright .
- 2 Confirm with **OK**
- **3** Use the extstyle extstyle
 - * 'No Program was found' appears on the screen There is no TV show today that matches the selected category.
 - Select a different day with ▶ , ◀ .
 - Press **\(\Lambda \)** to return to the **'Search'** screen.

Function buttons (colour buttons) in the 'Search'

screen

If you have highlighted a show you can use the coloured buttons to perform the following actions:

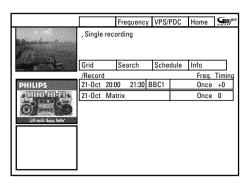
'Record' (red button):

The highlighted show will be programmed for recording. It appears in the 'Schedule' screen.

'Home' (blue button):

Return to the current time in the listing (' $\mbox{\it Grid}$ ' screen).

The 'Schedule' screen



This menu displays the shows that are set to record. You can clear recordings or make changes using the function buttons. Moreover, you can manually program recordings.

Depending of the type of programming a recording appears:

Programming from the 'Grid' screen:

'21-Oct: Day and month of the recording

'Matrix': Title of the show (if it is transmitted)

Programming from the 'Schedule' screen:

'21-Oct': Day and month of the recording

'**20:00**': Start time

'**21:30**': Stop time

'BBC1': TV channel

Additionally appears to each programmed recording:

'Freq.

Frequency 'Once'..once/'M-F..daily (Monday to Friday)/'Mon'..weekly (every week on the same day, e.g. Monday)

'*Timing*': In case an extended switch-off time has been entered or 'VPS/PDC' (V-P) is switched on.

Function buttons (colour buttons) in the 'Schedule'

screen

You can select between programming with ShowView® (red button) or manual programming (green button).

If you selected an already programmed TV show, you can make changes using the colour buttons of the remote control. The function of the colour buttons will change depending on the tile you select. Always check the function (description) in the corresponding colour field before pressing a button.

1 Press ▼.

Select the corresponding recording with lacktriangledown , lacktriangledown .

2 Select the corresponding tile with \triangleleft , \triangleright .

left tile

red button: clear the recording green button: change the data

center tile

yellow button: change the TV channel

right tile

green button: repeat

yellow button: extend switch-off time, switch VPS/PDC on/off

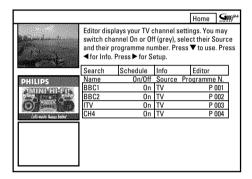
The GUIDE Plus+® System

The 'Info' screen

This screen can be divided in subcategories. These depend on the information provided by the GUIDE Plus+® system. If there are no categories available, no data has been provided yet. Try visiting this page later.

- 1 Press ▼ .
 Select the corresponding subcategory with ▼ , ▲ .
- 2 Select from the displayed data with ∇ or \triangle .
- **3** Confirm using **OK** to receive more information.
- Return to the 'Info' screen by pressing the red function button ('Info').

The 'Editor' screen



Here you can allocate the programme numbers to the corresponding TV channels and switch them on/off for the programme listings ('*Grid*' screen). Moreover, you can define the use of the TV channels on the external receiver.

- 1 Press ▼.
- 2 Select the TV channel you want to change using $\, lacksquare\,$. $\, lack \Delta \,$.
 - O Use the ◀ and ▶ buttons to switch between tiles.

left tile

This tile contains the TV channels with their short descriptions and indicates whether the TV channel is displayed in the programme listing ('*Grid*' screen) or not.

 You can switch on/off a TV channel for the 'Grid' screen using the red function buttonn

right tile

This tile contains the TV channel properties and the programme numbers. You can modify channel allocation or assign an external receiver. In order to assign a receiver, it must be already installed in the GUIDE Plus+® system.

To change allocations, proceed as follows:

- lacktriangle Select the TV channel you want to change using lacktriangle , lacktriangle .
- 2 Press the green function button.
- 3 Enter the programme number of the TV channel using the number buttons 0..9. You can only enter programme numbers of TV channels that have already been installed.

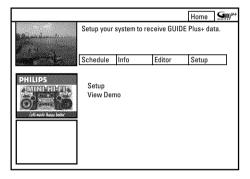
Entering the TV-channel of an external receiver

- Select the TV channel you want to watch only through the external receiver using \blacktriangledown , \blacktriangle .
- Choose the corresponding source using the red function button.

 This function button is only available when at least one external receiver has been installed. Read section 'Setting up the GUIDE Plus+® system' on how to install an external receiver.
- Press the green function button. Enter the programme number of the TV channel which you would also enter for this TV channel on the external receiver.

Please observe that in the case of modified TV channels, the transfer of GUIDE Plus+® channel data may take up to 24 hours.

The 'Setup' screen



Here you can make or change the basic settings such as language, country, external receiver. Moreover, you can watch an automatic demonstration of the GUIDE Plus+ $^{\odot}$ system.

'Setup'

All the settings you have already made are displayed here. Select the desired line using \P or \blacktriangle and confirm with OK. For more information on the settings, read section 'Setting up the GUIDE Plus+® system' in chapter 'The GUIDE Plus+® system'.

'View Demo'

Here you can view a demonstration of the different functions of the GUIDE Plus+ $^{\otimes}$ system.

Start the automatic presentation with $\,$ **OK** .

General

As soon as you turn on the DVD recorder, the currently selected TV channel on the DVD-Recorder is recorded in a temporary storage (Time shift Buffer).

Recordings in the time shift buffer will be automatically deleted e.g. after 3 hours if the period of the time shift buffer is set to 3 hours (factory setting). Only recordings marked in the Time shift Buffer will be stored on the the built-in HDD For more information, read the next section 'The Time Shift Buffer'.

The following additional information is stored with each recording:

•) name of the recording

If no name is recognised from the GUIDE Plus+® systems data, only the programme number (programme name) and the time will be stored as the name.

- •) length of the recording
- •) recording mode (quality)
- •) date of the recording
- •) index picture of the recording

To facilitate the search of a specific position, a chapter marker is recorded every 5 minutes. How you switch off this function you will read in chapter 'User preferences for the HDD' in the section 'Preferences', 'Recording', 'Chapters'. After the recording is completed, you can select these markers with $| \blacktriangleleft |$, $| \triangleright |$. Please make sure that the chapter selection is activated (the 'CHAPTER' symbol lights up in the info bar at the top of the screen). If necessary, you can activate it using T/C.

The Time shift Buffer



As a result of the high data transfer speed of the HDD, it is possible to play back recordings from the time shift buffer while the recording is still in process.

Therefore, you can jump back to the currently selected TV programme using **JUMP BACK** and watch a scene again.

Moreover, you can use all playback features such as still picture, slow motion, search by time, search with \bowtie , \bowtie even with recordings that are still in the time shift buffer.

In the meantime, the recording continues.

If you change the TV channel on the DVD-Recorder (<code>CHANNEL+</code> , <code>CHANNEL-</code>) a new title is created with the new TV channel in the time shift buffer. If you watch a TV show only for a short time (less than 60 seconds) before you change to a different TV channel, no new title is created.

For easier navigation, you can change the time period of the time shift buffer from I to 6 hours. I hour means that a recording is available only for one hour before it is automatically deleted to make room for the current recording.

If the GUIDE Plus+® system delivers title information, the latter is also stored with the recording. When recording TV shows without GUIDE Plus+® information, only the date and the time of the recording are stored as title.

What is the advantage from I hour and 6 hours?

The complete time periode of the time will be displayed on the whole screen of your TV.

With 1 hour you will get the highest comfort for searching a specific scene. With 6 hours you will get the highest possible recording time.

Please observe that the Time shift Buffer needs also storage capacity on the HDD. Depending of the selected record mode (picture quality):

6 hours in '**M1**' = approx. 28GB

6 hours in 'M8' = approx. 3,4GB

How you enter the time periode, read in the chapter 'User preferences for the HDD' in the section 'Preferences' / 'Recording' 'HDD buffer'.

Symbols in the 'Time Shift Buffer'

Following symbols can appear in the info bar at the top of the screen in the 'Time Shift Buffer'. With the **INFO** button on the remote control you can also call up this infobar.

Left area

Information about the input signal were displayed here:

'Y' Actual TV show (live picture) from the selected TV channel

'P01' Programme/Channel number of the selected TV channel

'ARD' Name of the TV-channel

'©' Playback from the HDD

Right area

Information about the current operating status were displayed here:

'① 16:03:02' Actual (live) picture of the selected TV-channel (TUNER button)

DPLAY Playback from the HDD

' PAUSE' Still picture

'4-1/2X' Slow motion backwards

'₩ 4X' Fast motion forwards

'4 -4X' Fast motion backwards

Navigation in the time shift buffer

Preparation:

- •) The TV set is switched on, and, if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched to tuner mode (button TUNER).
- 1 Press INFO to display the bar of the time shift buffer on the screen
- 2 The following buttons are available:
 - O I◀◀, ▶▶I, PLAY ▶, PAUSE II, ◀, ▶, JUMP FWD, JUMP BACK for navigation in the time bar.
 - O T/C

Switching between title/chapter for selection using \blacktriangleleft , \blacktriangleright . The top screen line displays either '*TITLE*' for selecting titles or '*CHAPTER*' for selecting chapters

O REC/OTR :

- To start a recording that will be stored on the HDD.
- To mark a title that will be stored on the HDD.
- Hold button down to start the recording from the actual position.

O Red function button:

- To cancel the marked recording that was set with the **REC/OTR** button.
- Hold button down to stop the recording at the actual position.

O Yellow function button: ('OVERVIEW')

To display an overview of all content of the time shift buffer.

O Blue function button:('MORE INFO'):

To display any additional information for the actual TV show transmitted by the GUIDE Plus+® system.

Mark TV shows for recording

As a rule, recordings in the time shift butter are automatically deleted after a certain time (I to 6 hours). In order to store recordings on the HDD permanently, you can mark sections of the time shift buffer that will not be deleted and will be available as titles for later playback.



Mark an entire title

A title marker is set if you are watching a TV show longer than 60 seconds. (No change of programme number within 60 seconds) If you want to mark an entire title (title marker at the beginning and at the end), proceed as follows:

- Press INFO to display the bar of the time shift buffer on the
 - You can also press the yellow colour button to get a better overview of the recordings.
- **2** Select the title you want to store with \mathbf{V} , \mathbf{A} .
- 3 Press REC/OTR to mark the title.
 - → The colour within the bar changes to red. If you press the yellow button, you will see programmes marked for recording with a red dot.
 - O To remove the marker, press the red function button. The red title marker disappears.
- 4 If you want to mark other titles, repeat steps 2 and 3, until you have selected all the titles you want.
 - O If you want to mark several titles in a sequence, go to the oldest title and press **REC/OTR** several times.

O Using REC/OTR ● you can also mark the future end of a title (actual TV-show is not over yet) You will see this in the red marked '|||||||| symbol on the right end of the Time Shift Buffer bar.

The recording will be stoped automatically at the end of the program.

If the start (titlemarker) of the TV-Show was not taken from the GUIDE Plus+® System, or no GUIDE Plus+® is available, you can extend the end by +30, +60, +90 ,... minutes using **REC/OTR** ● .

Mark part of a title

You can also mark only parts of a title.

If you mark several parts of a title, each part will be stored as a separate title on the HDD.

- Press INFO to display the bar of the time shift buffer on the screen.
 - You can also press the yellow colour button to get a better overview of the recordings.
- 2 Select the title you want to store with $\, lacksquare\,$. $\, lacksquare\,$
- 3 The following options are available:
 - O Freely selectable end:
 - Press REC/OTR

 to select the entire title. The colour changes to red.
 - Search for the desired end using \triangleleft , \triangleright .
 - Hold down the red button:

Red marked recording changes to its original colour from the current position to the end of the title.

If you want to set more markers in one title, start marking at the begin of the title.

O Freely selectable beginning:

- Search for the desired beginning using \blacktriangleleft , \blacktriangleright .
- Hold down the REC/OTR button.
 The marker changes to red from the current position to the end of the title.

O Freely selectable beginning and end:

First, you must define the beginning and then cut off the end.

- Search for the desired beginning using \blacktriangleleft , \blacktriangleright .
- Search for the desired end using \blacktriangleleft , \blacktriangleright .
- Hold down the red button:
 Red marker changes to its original colour from the current position to the end of the title.

How can I delete the changes?

Press $REC/OTR \bullet$ to mark the entire title.

To remove the marker, press the red function button.

'Auto delete'

If there is no space for new recordings on the HDD, recordings will be automatically deleted in the following order:

- 1) Titles that have already been viewed. Symbol '.
- 2) Titles that were not protected. No symbol '√' available.

More information you will find in the chapter 'User preferences for the HDD'.

Manual recordings

Recordings from the actual on the DVD-Recroder selected TV channel are always started and recorded in the time shift buffer as soon as you switch on the device. To store recordings on the HDD, choose from the following:

Start of the recording:

 Start the recording from the begin of the TV-show (Start is known from the GUIDE Plus+® System, or change orf the TV program)

Press **REC/OTR** ●.

- O Start the recording from the actual position (from now)
 Hold REC/OTR pressed, until the red light around the
 - button on the front is switched on.

Stop the recording in progress:

O Stop the recording automatically: If the start of the TV show is known from the GUIDE Plus+® System

The recording will stop at the end of the TV-Show.

O Stop the recording manually:

Hold the red button on the remote control pressed, until the red light around the ● button on the front is switched off.

- -You can mark a recording for storage on the HDD using **REC/OTR** on the remote control or on the device. Such marked recordings are displayed as a red bar in the time shift buffer and are not automatically deleted after the time shift buffer period (1 to 6 hours) expires.
- -If you switch off the DVD recorder with **STANDBY** \circlearrowleft or select the '*Flush Buffer*' function, all other recordings of the time shift buffer will be deleted.

OTR recordings

Recordings made using **REC/OTR** will be automatically stopped after the end of the TV show if information is available from the GUIDE Plus+® system. If no information is available, you can select the time after which a recording will automatically stop using

REC/OTR ● . (each time you press the button, you prolong the switch-off time by 30 minutes)

If you press the red function button, the marker for the recording is removed.

Direct Record

If the recording is manually started, the **switched off** DVD recorder receives the currently selected TV channel through the scart cable. The selected TV channel is compared with the stored TV channel of the DVD recorder. If the TV channel can be found, the DVD recorder selects it and starts the recording.

If no corresponding TV channel is found in the DVD recorder, an error message appears.

Read the next section 'Switching Direct Record on or off' on how to switch Direct Record on or off.

How does Direct Record work?

The DVD recorder compares the TV channel selected on the TV set with its stored TV channels via the scart cable. If the same TV channel is found, the DVD recorder switches to the corresponding programme number and starts recording.

Please do not change channel on the TV set during search. This may affect the tuning on the DVD recorder.

- 1 Select the programme number on the TV set from which you want to make the recording.
- 2 Press REC/OTR while the DVD recorder is switched off.
- × 'WAIT' appears in the display
- The DVD recorder compares its stored TV channels with those of the TV set. Please do not change channel on the TV set while 'WALT' appears in the display.
- × 'Naw' appears on the display
- ✓ This TV channel was not found in the memory of the DVD recorder.

 Check whether all TV channels stored in the TV set are available on the DVD recorder. If necessary, store the missing TV channels. Read section 'Manual TV channel search' in the chapter 'Installing your DVD recorder'.

 This TV channel was not found in the memory of the DVD recorder.

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 This TV channel was not found in the TV set are available on the TV set are available on
- ✓ Check the connectors of the scart cable.
- Consult the instruction manual of your TV set to find out which scart socket sends out video signals.
- ✓ If all this is to no avail, you cannot use this function.
- 3 To stop the recording press and hold the red function button on the remote control until the red light around the button is switched off.

Switching 'Direct Record' on or off

- 1 Press BROWSER HDD and then SYSTEM MENU button on the remote control.
 - → The 'SYSTEM MENU' appears.
- 2 Select 'Preferences' with ▼.
- 3 Press ► to select 'Recording'.
- Select 'Direct rec.' (second menu page) using ▼ .
- **5** Select '*On*' using ▶ .
 - O To switch off the function, select '*Off*' using ▶.
- 6 End with SYSTEM MENU.

Automatic recording from a satellite receiver (sat recording)

You can use this function if you have a satellite receiver that can control other devices via a scart cable and has a programming function (timer). For more information, consult the instruction manual of your satellite receiver.

- 1 Switch on the TV set. If necessary, select the programme number for the DVD recorder.
- 2 Press the BROWSER HDD and then the SYSTEM MENU button on the remote control.
 - → The 'SYSTEM MENU' appears.
- 3 Select 'Preferences' with ▼.
- 4 Press ▶ to select 'Recording'.
- 5 Select 'Sat record' (second menu page) using ▼.
- 6 Select 'On' using ▶.
 - **O** To switch off the function, select '*Off*' using ▶ .
- 7 To end, press SYSTEM MENU.
- 8 Connect the EXT2 AUX-I/O scart socket of the DVD recorder with the corresponding scart socket of the satellite receiver using a scart cable.
- 9 Program the satellite receiver with the desired data for recording (programme number of the TV channel, start time and end time). If necessary, also consult the instruction manual of your satellite receiver.
- **10** Switch off the DVD recorder using **STANDBY** \circlearrowleft .
 - → In addition, 'SAT' will appear in the display to indicate that the function is activated.
- If necessary switch the satellite receiver to standby. See the instruction manual for the satellite receiver for details.

The DVD recorder is now ready for recording.

→ The start and the end of the recording will be controlled via the EXT2 AUX-I/O scart socket.

Recording from a video recorder/DVD player

Please observe:

Most pre-recorded video cassettes or DVDs are copy-protected. If you try to copy these, the message 'ETP' PRTT' will appear in the display of the DVD recorder.

Preparation:

- •) Switch on the TV set and, if necessary, select the programme number for the DVD recorder
- •)Switch on the DVD recorder.
- •) Select recording mode (button TUNER, button SYSTEM MENU, 'Preferences', button > 'Record mode').
- 1 Connect the video recorder/DVD Player as described in the chapter 'Connecting additional devices'.
- Press TUNER to display the picture of the Video recorder/DVD player on the screen.
- 3 Use CHANNEL , CHANNEL + to select the programme number of the input socket to which the Video recorder/DVD player is connected. ('EXT1' for EXT1 TO TV-I/O, 'EXT2' for EXT2 AUX-I/O)

Please observe that for recordings via the front sockets S-VIDEO (CAM1) / VIDEO (CAM1) / EAM 1 or DV IN (CAM2) / EAM2 the recording mode must be selected under 'Camera mode' in 'Preferences' of the system menu.

- 4 Switch on the video recorder/DVD player.
 - O In case playback has started automatically, interrupt it with STOP or PAUSE II .
- Start recording by pressing REC/OTR on the DVD recorder and playback by pressing PLAY ➤ on the video recorder/DVD player.
 - × When copying video cassettes, 'N□ 515NRL' appears in the display of the DVD recorder
 - ✓ Check whether the cable connectors are properly inserted.
 - ✓ If the recording is made from a video recorder, change the 'tracking' setting on the video recorder.
 - In case of bad or non-standard video input signals, the DVD recorder may be unable to detect the signal.
 - × When copying DVD video discs or pre-recorded video cassettes, the picture is fuzzy and brightness varies
 - ✓ This happens when you try to copy DVDs or video cassettes that are
 copy-protected. Although the complete cassette/disc is recorded, only
 parts without copy protected signal can be played back. This
 interference is unavoidable with copy-protected DVDs or video
 cassettes.
- 6 To stop the recording press and hold the red function button on the remote control until the red light around the ● button is switched off.

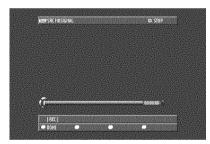
Recording from a camera connected to the front sockets

Using this function, you can store recordings via the front sockets directly on the HDD. These titles will be automatically protected to prevent them from being automatically deleted in case the HDD is full. The symbol \checkmark indicates such a protection.

You can edit these recordings on the HDD and transfer (archive) them later on a DVD+RW/+R disc. How you archive recordings on a DVD+RW/+R you will read in the chapter 'Recording on a DVD+RW/+R' in the section 'Archiving (storing) titles on a DVD+RW/+R'.

Please observe the following:

- •) Any programmed recordings (TIMER) will not be carried out during this operating mode.
- •) If there are any recordings in the time shift buffer, they will be deleted. Therefore, store important recordings on the HDD (**REC/OTR** •). For more information on the time shift buffer, read the chapter 'The Time Shift Buffer'.
- 1 Connect the camera as described in the chapter 'Connecting additional devices/Connect camcorder to the front sockets'
- 2 Press CAM on the remote control.
 - The DVD recorder will switch to camera mode.



- 3 Select the socket to which the camera is connected using CAM.
 - O 'ERM 1'

For recordings from the VIDEO (CAM1), S-VIDEO (CAM1) sockets.

Switching between the two sockets is done automatically. If a signal is available at both sockets at the same time, the signal at the S-VIDEO (CAM1) socket has priority. If you change socket (unplug), you must re-select the socket using CAM (press twice).

O 'LAM2'
For recordings from the DV IN (CAM2) socket.

- 4 Press REC/OTR

 to start the recording.
 - If no signal is available, no recording will be made or the recording in progress will be stopped.
 - → During the playback of a recorded 'copy protected' signal you will see only that parts of the recording where no copy protection can be recognised.

5 You can stop the recording using the following buttons:

O PAUSE II

The recording will be paused. If you press the button again, the recording will resume.

A new chapter is created.

O STOP ■

The recording will be interrupted. You can start a new recording by pressing $REC/OTR \bullet$. A new title is created.

- 6 Press the red function button to terminate the camera operating mode
 - → The recording will be stored on the HDD as a new title.

General

Use 'Programming a recording (TIMER)', to automatically start and stop a recording at a later date.

The DVD recorder will switch to the right programme number and begin recording at the correct time.

On this DVD recorder you can pre-programme up to 12 recordings within a period of one month.

To make a programmed recording, your DVD recorder needs to know:

- * the date you want to make the recording
- * the programme number of the TV channel
- * the start and stop time of the recording
- * VPS or PDC on or off

This information is saved in a 'TIMER block'.

Before you begin, make sure the clock is set. If the clock is not set, the '*Time/Date*' menu will appear when you press the **TIMER** ① button.

What is 'VPS/PDC'?

- 'VPS' (Video Programming System)/'PDC' (Programme Delivery Control) are used to control the start and duration of TV channel recordings. If a TV programme starts earlier or ends later than was scheduled, the DVD recorder will then turn on and off at the correct time.

What do I need to know about 'VPS/PDC'?

- Usually the start time is the **same** as the VPS or PDC time. If a different 'VPS/PDC time' is indicated, e.g.: '20.15 (VPS/PDC 20.14)', the **VPS/PDC time** '20.14' must be entered **exactly to the minute** during programming.

If you want to programme a time that is different from the VPS or PDC time, you must switch off VPS or PDC.

- Only one TV program of a TV channel can be controlled using 'VPS/PDC' at a time. If you want to record two or more TV programmes on a TV channel using 'VPS/PDC', you will need to programme these as two separate recordings.
- Since the DVD recorder requires a certain lead time (for getting the disc up to speed and positioning the laser) before recording can start, it is possible that the recorder will miss the first few seconds of a TV show recorded with VPS/PDC.

In this case, disable VPS/PDC and enter a start time one minute earlier.

Programming recordings with the GUIDE Plus+® System



The GUIDE Plus+® System has made it even easier to programme recordings. All you have to do is select the show you want to record from a channel listing.

Preparation:

- •) The TV set is switched on, and, if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- 1 Press GUIDE/TV on the remote control.



2 Use ▲ or ▼ to select the TV station, and ◀ or ▶ to select the show to record.

You can page trough channels using **CHANNEL** +, **CHANNEL** − and page trough days using **I**◀◀ , ▶▶ .

- × I do not see all available TV channels
- ✓ Please check your correct channel line up in the 'Editor' screen. Read therefore the section 'The 'Editor' screen in the chapter 'The GUIDE Plus+® system.
- ✓ The GUIDE Plus+® '**Grid**' screen contains only those TV channels that were detected by the GUIDE Plus+® system using a 'channel identification'. TV channels that do not have this 'channel identification' are not available in the GUIDE Plus+® system. Please use 'Manual TIMER programming' to program TV shows of such TV channels.
- 3 Confirm using the red function button of the remote control ('Record' on the screen).

The TV -show is programmed for recording. Read the information on the screen.

- <u>'Warning, this programme number has not been</u> <u>allocated, please go to Editor to set it.' appears on the</u> <u>screen</u>
- ✓ The programme number of the TV channel is not available in the GUIDE Plus+® system or allocation is wrong.
- To change or check the channel data, proceed as follows:
- Press A

Select '**Editor**' with ▶ .

- Select the TV channel using $\,\,lacktriangledown$ or $\,\,lacktriangledown$.
- Press ► to go to the right tile.
 In case you can receive the selected channel only via an external receiver, press the red button to select the corresponding source.
- Press the green button.
- Enter the programme number of the TV channel using the number buttons.

If the source you have selected is an external receiver, enter the programme number that you would also enter at the external receiver for this TV channel.

- 4 Repeat steps 2 to 3 to program all your recordings.
- 5 End with the GUIDE/TV button.
 To find out how you can check which shows you have programmed, read the section on 'How to change or delete a programmed recording (TIMER)'.

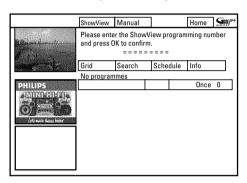
If one or more recordings have been programmed 'TIMER' will light up on the display.

Programming recordings with the ShowView[®] System

SHOWVIEW®

Thanks to this programming system, you no longer need to tediously enter the date, programme number, start and finish times. All the information needed by the DVD recorder for programming is contained in the ShowView® programming number. This 9-digit ShowView® number is found in most TV listings magazine.

- 1 Switch on the TV set. If required, select the programme number for the DVD recorder.
- 2 Press **TIMER** ① on the remote control. The '**Schedule**' screen will appear
- 3 Press the red function button ('ShowView').



4 Enter the entire ShowView number. This number is up to 9 digits long and can be found next to the start time of the TV programme in your TV listings magazine.

e.g.: 5-312-4 or 5,312 4

Enter 53124 for the ShowView-number.

Use therefore the number buttons **0..9** on the remote control. If you make a mistake you can press ◀ or the green action button to go back a position.

5 Confirm with **OK**.

× 'Please enter programme number' appears on the screen

✓ This message appears when the TV channel has not been assigned in the GUIDE Plus+® system yet.

To change channel data, proceed as follows:

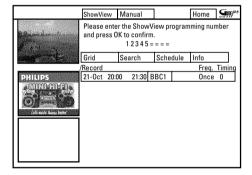
- Press A
- Select '**Editor**' with ▶ .
- Select the TV channel using ∇ or \triangle .
- Press ▶ to go to the right tile.

In case you can receive the selected channel only via an external receiver, press the red button to select the corresponding source.

- Press the green button.
- Enter the programme number of the TV channel using the number buttons.

If the source you have selected is an external receiver, enter the programme number that you would also enter at the external receiver for this TV channel.

- Confirm with OK .
- The following message appears on the screen: 'ShowView number wrong'
- ✓ Check time/date (see chapter 'Installing your DVD recorder', section 'Setting the time & date').



6 The decoded data appears after confirmation.

You can use the colour buttons to make the following settings. First, the right tile must be highlighted (▶ button). Check the functions (descriptions) in the corresponding colour field before pressing a button.

Activate 'VPS/PDC'

Keep pressing the yellow action button until 'VPS/PDC' appears instead of the time.

Setting up repeat recordings

You can choose from the following settings with the green action button:

'Frequency': 'Once': single recordings

'M-F': Repeated daily recordings (Monday to Friday). 'Mon': Repeated weekly recordings (every week on the same day e.g. Monday).

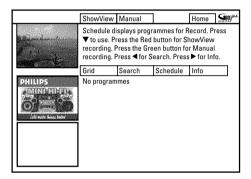
- **7** If all information is correct, press the **OK** button. The data is stored.
- 8 To end, press TIMER ⊕.

If one or more recordings have been programmed 'TIMER' will light up on the display.

Programming recordings without the ShowView[®] System

Preparation:

- •) The TV set is switched on, and, if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- 1 Press TIMER ① on the remote control.
 - → The 'Schedule' screen appears
 - × Lwill see some informations about the GUIDE Plus+® System
 - √ The GUIDE Plus+® System was not installed yet. Read therefore in the chapter 'The GUIDE Plus+® System' the section 'Set up the GUIDE Plus+® System'.



- 2 Press the green button.
 - The current date will be displayed.
- 3 Enter the date using the number buttons 0..9
- 4 Confirm with **OK**.

How can I correct wrong entries?

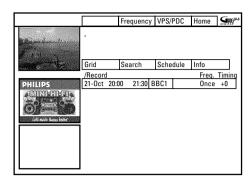
If you have already confirmed the entry with $\,$ **OK** , you can select one of the following functions:

Repeat entry: Green colour button

Cancel: Red colour button

- 5 Enter the start time for the show using the number buttons 0..9.
 Confirm with OK.
- **6** Enter the finish time for the TV show using the number buttons **0..9** Confirm with **OK** .
- 7 Check the data you entered.
 - O If necessary, go back a position to change entered data using the green function button.

8 Enter the programme number of the TV channel using the number buttons 0..9



Selecting a TV channel from the listing

You can only use this function if data from the GUIDE Plus+® system is already available.

- Press the yellow function button. You will see an overview of all
- Select the TV channel you want to program using \blacktriangleleft , \Vdash You can browse back or forth using CHANNEL +, CHANNEL - .
- Confirm with OK .

Programme numbers of the scart sockets 'EXT1' and 'EXT2'

You can also program recordings from external sources.

- Select the corresponding input socket using lacktriangleright or lacktriangleright . 'EXT1' (EXT1 TO TV-I/O), 'EXT2' (EXT2 AUX-I/O).
- Confirm with OK .

Changes using the colour buttons

You can use the colour function buttons to make the following settings. Make sure that the right tile is selected.

'Frequency': Green function button

'Once': single recordings

'M-F': Repeated daily recordings (Monday to Friday).

'Mon': Repeated weekly recordings (every week on the same day, e.g. Monday).

Activate VPS/PDC ('Timing'): Yellow function button

Using this button, you can activate (appears) or deactivate ('VPS/PDC' disappears) 'VPS/PDC' in tile 'Timing'

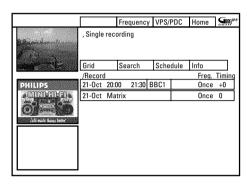
9 To find out how you can go back and change the data, read the section on 'How to change or delete a programmed recording (TIMER)'

If any of the TIMER blocks are in use, 'TIMER' will light up on the recorder display.

How to change or delete a programmed recording (TIMER)

Preparation:

- •) The TV set is switched on, and, if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- f 1 Press f TIMER $f \Theta$ on the remote control while the DVD recorder is switched on.
 - → The 'Schedule' screen will appear.



2 Use ∇ or \triangle to select the programmed recording you want to change or delete.

Depending on the programming method (using GUIDE Plus+® system, with/without ShowView® system), it is not possible to carry out certain changes using the function buttons. Therefore, always check the function of the corresponding button (description in the colour field) before pressing the button.

Delete programmed recording

Press the red action button in the left tile.

Changing the TV channel

You can make this change only for recordings that were not set using the 'Grid' screen.

In the case of recordings using the 'Grid' screen, centre tile is not available.

- Select the centre tile with ▶ .
- Press the yellow function button.
- Select the TV channel you want using lacktriangledown , lacktriangledown , lacktriangledown . Sender.
- Confirm with OK.

Activate VPS/PDC

Keep pressing the yellow function button in the right tile until 'VPS/PDC' appears in the 'Timing' line instead of the time. If you programm a recording using the GUIDE Plus+® System, the VPS/PDC time will be taken automatically. VPS/PDC can be switched on or off without readjusting the start time.

Setting up repeat recordings

You can choose from the following settings in the right tile using the green function button:

'Frequency' ':Once': Once recordings

'M-F': Repeated daily recordings (Monday to Friday). 'Mon': Repeated weekly recordings (every week on the same day, e.g. Monday).

3 To end, press **TIMER** ②.

A message appears few minutes before the recording is about to start if the DVD-recorder is tuned to a different TV channel as programmed. If you confirm this message the TV channel will be changed and the recording started.

Cancel a programmed recording in progress

A programmed recording will run as long as the end of the TV show is reached (end time of the schedule or end time out of the GUIDE $Plus+^{\otimes}$ System)

If you switch off the DVD-Recorder with **STANDBY** \circlearrowleft the DVD-Recorder will be switched off after the recording is completed. If you want to cancel the programmed recording proceed as follows:

- 1 Press the red function button
- 2 Select 'Yes' using ◀ and confirm with OK.
 - The programmed recording can also be canceled as described in the previous section 'How to chnage or delete a programmed recording (Timer)'.

General

Each recording stored on the HDD is displayed in the media browser with a corresponding index picture.

Press BROWSER HDD on the remote control or HDD on the DVD recorder.

→ The Media Browser appears.



2 Select the title you want using ▼ , ▲ on the remote control or DOWN , UP on the device.

You can switch a page forward or back using CHANNEL +,

- 3 You can choose one of the following options to start playback:
 - О ОК

Playback always starts at the beginning of the selected title.

O PLAY►

Playback will start at the position where it was interrupted in the selected title (STOP \blacksquare). This also works if other titles or DVDs have been played in the meantime.

4 You can use the following buttons during playback:



O | ← , ▶ ▶ |

Briefly press: If chapter markers are available, start of current chapter, previous chapter (press twice), next chapter **Hold down:** during pause: Slow motion during playback: Qquick motion.

O JUMP FWD, JUMP BACK

Jump back or forward by a fixed time period.

Read section 'Set up/Jump forward, Jump back' in chapter 'User preferences for the HDD' on how to set up this time period.

O INFO

Display/Hide navigation bar with additional information.

O PAUSE II

Still picture. Go forwards or backwards one frame at a time using $\,\blacktriangleright\,$, $\,\blacktriangleleft\,$.

5 Press STOP ■ to end playback.

→ You will return to the media browser.

The position where playback was interrupted will be automatically stored. By pressing **PLAY** ▶ , playback resumes at this position.

Additional playback features

Search by time

During playback of a title from the HDD or recordings in the time shift buffer, you can search for positions by directly entering the time:

- 1 Press SYSTEM MENU during playback of a title.
 - → The system menu appears.
- 2 Press ▶ in line 'Toolbar' to select 'Options'.
- **3** Press ▼ to select '*Time search*' and confirm with ▶ .
 - * It is not possible to select 'Time search'.
 - ✓ A title of the time shift buffer is played back that has no end yet (no programme change, or TV show is not over yet).
 - The time of the current playback position is displayed.
- 4 Use the number buttons **0..9** of the remote control to enter the time where you want playback to start.
- 5 Confirm with **OK**.
 - → Playback starts at the desired position.

Repeat

You can choose the entire title for repeated playback.

- 1 Press BROWSER HDD and choose the desired title with ▼,
- 2 Press OK to start playback.
- 3 Press the green function button.
 - A symbol appears on the screen to display the repeated playback.
 - O To switch of repeat play press the green button again. The symbol disappears.

Zoom feature

The Zoom feature allows you to enlarge the video image and pan through the enlarged image during play back from the HDD or from the time shift buffer.

- 1 During playback, press **PAUSE II** at the position where you want to enlarge the picture.
 - → You will see a still picture.
- 2 Press SYSTEM MENU.
 - → The 'System Menu' appears.
- 3 Press ▶ in line 'Toolbar' to select 'Options'.
- 4 Press ▼ to select 'Zoom' and confirm with ▶.
 - → On the screen arrows appears to indicate the directions. If neccessary switch on the info bar with **INFO**.
- **5** Select with **4**, **▶**, **∆**, **▼** the area you want to enlarge.
 - O zoom in blue function button
 - O zoom out yellow function button
 - O You can also pan in the enlarged picture using \bigvee , \bigwedge , \triangleleft ,
- 6 End with the red function button.
 - → Play back starts automatically

The media browser



Each recording stored on the HDD is displayed in the media browser with an index picture. A actual recording of a TV show in the time shift buffer is also displayed here.

Please observe that title/chapter editing is only possible to a certain degree with such recordings.

Title editing includes:

- change
- delete
- archive
- lock (child lock)
- protect (against automatic deletion)

Titles in the Time shift Buffer marked for storage on the HDD, can only be locked or deleted.

Symbols in the 'Media Browser'

If you call up the Media Browser with the **BROWSER HDD** button, following symbols can appear in the infobar at the top of the screen:

- This title was marked in the Time Shift Buffer for the storage on the HDD. This title can only be deleted or locked (child lock)
- 'D' This title has been played once (has been 'watched'). If there is no storage capacity free on the HDD such 'watched' titles will be deleted automatically. You can change these setting in the title edit menu (EDIT button, blue button, EDIT button)

 Titles that were not played back, will have no symbol.
- 'V' The title is protected against editing and deleting. If the title is not protected, no symbol will be shown.
- '\(\hat{\textsf{l}}\)' Child lock is activated. The index picture is switched off. Playback starts only if the right PIN code was entered. By default '0000' is defined as the PIN code. In the section 'Changing the PIN code' in chapter 'Access control (Child Lock)' you will find how you can change this code.
- '52' The marked titles will be stored (archived) on a DVD+RW/+R.

Change order for the media browser

Your may choose only titles that meet certain criteria for the overview. This order will remain until you exit the media browser.

- 1 Press BROWSER HDD on the remote control.
 - → The Media Browser appears.
- 2 Press ◀.
 - → The 'Order Menu' appears.
- Select one of the following options using ▼ or ▲ and confirm with OK.
 - O 'Alphabetical':

Alphabetic order

O 'Recording Date':

Sorting according to the date of the recording

O 'Delete Order':

Sorting according to the order of the automatic deletion. If there is too less space for new recordings on the HDD, this order shows which recordings will be automatically deleted first.

O 'Protected':

Order according to the recordings protected against deletion.

O 'Last Played':

Sorting according to the titles last viewed.

Depending on the selected order, it may not be possible to select some titles.

Change title settings

Use this function to change the title settings.

- 1 Press BROWSER HDD on the remote control.
 - → The Media Browser appears.
- 2 Select the title you want to change with \mathbf{V} , \mathbf{A} .
- 3 Choose one of the following functions with the colour buttons of your remote control:
 - O Delete title:

red function button

The tiltle (recordings) will be erased from the HDD.

O Archive title:

green function button

The title will be transferred to DVD+RW/+R. If it is not possible to record on a DVD+RW/+R, an error message appears (disc not inserted,...).

If you want to archive several titles, mark the desired titles with **SELECT**. You can unmark the title using the same button.

O Lock title (child lock):

yellow function button

Playback starts only if the right PIN code was entered. By default '0000' is defined as the PIN code. In the section 'Changing the PIN code' in chapter 'Access control (Child Lock)' you will find how you can change this code.

O Protect title against editing, automatic deletion:

blue function button

An error message will appear if you try to edit this title. Automatically deletion will take place, if your HDD will run full with recordings. Stored recordings will be deleted in a certain order. See details in the section 'Symbols in the media browser'

Edit title

Use this function to adapt the title (recording) to your personal preferences.

- 1 Press BROWSER HDD on the remote control.
 - → The Media Browser appears.
- 2 Select the title whose settings you want to change with ▼ , ▲ . Press EDIT .
- 3 Select one of the displayed functions with ▼, ▲ and confirm with ▶ to proceed with the changes.

Depending on the selected function, you can choose different functions using the colour buttons on the remote control. The function of the button may vary. Therefore, read the function in the help line before pressing the button.

O 'Title name'

Change the name of the title.

O 'Clear chapters'

All chapter markers within the selected title will be deleted.

O 'Video edif'

Please read in the next chapter which modifications were possible.

'Video edit'

Here you can insert/clear chapter markers, hide chapters, merge chapters, or divide the title.



- 1 Press BROWSER HDD on the remote control.
 - → The Media Browser appears.
- 2 Select the title whose settings you want to change with ▼ , ▲ . Press EDIT .
- 3 Select 'Video edit' and confirm with ▶.
 - → Playback starts automatically.
- Search the position where you want to make changes with ◀,
 , |◀◀, ▶►|.

To enlarge the actual position of the timebar in several steps you can use \blacktriangle . You can switch back using \blacktriangledown .

- 5 Press PAUSE II:
 - O You can insert or remove chapter markers to find a scene easily with the **OK** button.
- **6** Choose one of the following functions with the colour buttons of your remote control:
 - O 'DIVIDE' (red function button):
 You can divide a title in as many parts as you like.
 - **O** 'MERGE'(green function button):

You can merge the current chapter with the previous chapter. (The previous chapter marker will be deleted). Please observe that you cannot use this function with titles.

O 'KEYFRAME' (yellow function button):

To select an index picture that designates this title in the media browser.

You can select this function only during still (button **PAUSE II**).

O 'HIDE' (blue function button):

You can hide or unhide certain chapters during playback (e.g. unwanted scenes).

Editing recorded titles (name)

From the GUIDE Plus+® data the title (name) of a TV show will be taken automatically (e.g. 'ROCKY'). Otherwise, only the programme number (programme name) and the time will be stored as the name of the recording. The name of the recording can only be changed after the recording has finished.

- 1 If necessary, press STOP to stop playback.
- 2 Press BROWSER HDD on the remote control.
 - → The Media Browser appears.
- 3 Use ▲ or ▼ to select the title whose title you want to edit.
- 4 Press EDIT.
 - → The title edit menu appears on the screen.
- **5** Select the line '*Title name*' and confirm using \triangleright .
 - → The field for editing the title appears.
- 6 Use ▶ or ◀ to select the position where the letter/number/icon is to be changed or re-entered.
- **7** Change the icon using \blacktriangle or \blacktriangledown .
 - O You can switch between upper and lowercase using SELECT.
 - You can clear all characters using the red function button ('CLEAR').
 - O You can stop editing without storing the change by pressing the green function button('CANCEL').

Enter characters using 0..9

Keep pressing the number button until the desired character or number is displayed. You can select language-dependent special characters at the corresponding letter using $I \blacktriangleleft 0$ or $I \blacktriangleleft 0$ e.g.: $I \blacktriangleleft 0$ press $I \blacktriangleleft 0$ for a and keep pressing $I \blacktriangleleft 0$ until $I \blacktriangleleft 0$ appears.

For special characters, press 1 several times.

The position for the following character is selected automatically.

Press 1 to insert an empty space.

Press the red function button to delete.

- 8 Repeat 6 and 7 until you have made the changes you want.
- 9 Save the new name with OK.
- 10 To end, press EDIT.

Divide title

You can divide a title in several parts (titles) as large as you like. Each of these parts (titles) is designated by a separate index picture.

You can also use this function to separate and delete an undesired end of the recording (commercial).

Warning! You cannot undo this division!

- 1 Press BROWSER HDD on the remote control.
 - → The Media Browser appears.
- 2 Select the title you want to divide using ▲ or ▼
- 3 Press EDIT on the remote control.
 - → The title edit menu appears on the screen.
- 4 Select the line 'Video edit' and confirm with ▶.
 - → Play back starts automatically
- 5 Search the position you want to divide the title using I◀◀ , ▶▶ . Press PAUSE II on the remote control.
 - → You will see a still picture.

To find the right position you can step a frame forward or backward using the ◀, ▶ button.

- 6 Press the red function button
 - → A message appears on the screen saying that the title is being divided.
 - The divided title will appear in the media browser with a new index picture. The last position in the name will increase by one.

This completes the division of the title.

Delete titles/recordings from the HDD

You can remove titles/recordings from the HDD to use the capacity from the HDD for new recordings.

- 1 Press BROWSER HDD on the remote control.
 - → The Media Browser appears.
- 2 Select the title/recording you want to delete using ▲ or ▼
- 3 Press the red function button ('DELETE')
 - → A note appears if you really want to delete this title.

If the red function button has no function ('**DELETE**' appears grey) check if the title is protected. You will see this on the symbol ' \checkmark ' on the screen.

Unprotect the title using the blue function button.

- 4 Select 'Yes' using ◀ and confirm with OK.
 - → The title is being deleted from the HDD.
 - O If the message window was closed, confirm the line with
 ▶ again.

Insert/remove chapter markers

To find you special scenes in one title faster, you can insert chapter markers. These markers can also be deleted.

- 1 Press BROWSER HDD on the remote control.
 - → The 'Media Browser' appears on the screen.
- 2 Select the title you want to modify using ▼, ▲.
- 3 Press EDIT on the remote control
 - → The title editing menu appears on the screen.
 - O If you want to remove all automatically created chapter markers confirm select the line 'Clear chapters' and confirm with ▶
- 4 Select the line 'Video edit' and confirm with ▶.
 - → Play back starts automatically.
 - O Insert chapter markers
 - Search the position where you want to insert a marker with \blacktriangleleft , \blacktriangleright , $\blacktriangleright\blacktriangleleft$, $\blacktriangleright\blacktriangleright$.
 - Press PAUSE II .
 - Press **OK** . The marker will be inserted.
 - O Remove chapter marker
 - Press PAUSE II .
 - Search the chapter marker you want to remove with $| \blacktriangleleft |$,
 - Press **OK** . The marker will be deleted.
- 5 End with EDIT.
 - → You will go back to the Media Browser.

Hide chapters (sections)

By default, all chapters are visible. You can hide or unhide certain chapters during playback (e.g. unwanted scenes).

In the editing mode, you will recognise a hidden chapter by a grey background and the description of the blue function button:

O 'HIDE':

Chapter is visible and can be hidden with the blue button.

O 'SHOW.

Chapter is hidden and can be made visible with the blue button.

To hide a certain scene, proceed as follows:

- 1 Press BROWSER HDD on the remote control.
 - → The 'Media Browser' appears on the screen.
- 2 Select the title you want to edit using $\mathbf{\nabla}$, $\mathbf{\Delta}$.
- 3 Press EDIT on the remote control.
 - The title edit menu appears on the screen.
- 4 Select 'Video edit' with ∇ and confirm with \triangleright .
 - → Play back starts automatically
- 5 Search the beginning of the scene (section) you want to hide using ▶▶ , I◀◀ , ◀ , ▶ . Press PAUSE II .
- 6 Set the start marker with the blue function button.
 - → The description of the function key changes from 'HIDE' to 'STOP HIDE'.
- Search for the end of the scene (section).
 - O Use ▶▶ , ► to search for the end of the scene.
 - → The area is being marked.

To enlarge the actual position of the timebar in several steps you can use \blacktriangle . You can switch back using \blacktriangledown .

To find the right position you can step a frame forward or backward using the \triangleleft , \triangleright button.

To select the end of the title use

8 Press PAUSE II at the corresponding position.

- 9 Set the end marker with the blue function button.
 - The 'hidden' area is greyed out.
 - → The description of the blue function key changes to '*HIDE*'.

End with **EDIT** .

→ Additionally to the original title the edited title appears in the 'Media Browser'.

You can delete the edited title without deleting the original

If the original title is being deleted, the edited tiltle will be also deleted.

During playback, the 'hidden' scene is skipped. If you want to archive the title you can decide to archive the original title or the edited one.

O Archiving of the 'edited' title

The 'hidden' szenes were not copied on the DVD+RW/+R.

O Archiving of the 'original' title

The 'hidden' szenes were copied as 'hidden' on the DVD+RW/+R. How you can make them visible again you can read in the chapter 'Managing the disc content'.

Recording on a DVD+RW/+R

Archiving (storing) titles on a DVD+RW/+R

You can choose the title of the HDD that you want to transfer on a DVD+RW/+R. The copying process is done at a higher speed than the recording. Therefore, you can transfer an 8-hour recording in '*M8*' recording mode on a DVD+RW/+R in just 30 minutes. This time depends on the recording mode used.

Please observe the following information:

- You cannot change the recording quality. You can only use the same recording quality that was used for recording on the HDD.
- New recordings will always be added at the end of existing ones.
 Ensure that the 'Empty title' after the last recording is large enough.
- The index picture from the title will be copied from the HDD and stored on the disc.
- Should you reach the maximum number of chapters per disc (255), the recordings will be transferred without chapter markers.
- The following information will also be stored on the disc in the process:

Chapter, recording mode, programme name (if available) title of the recording (name), date and time of the recording, index picture.

- If you archive the edited title, the 'hidden' chapters will be skipped and will no longer be available on the DVD+RW/+R.
- 1 Change the titles in the media browser to meet your preferences. (divide titles, change title name, hide chapter, ...)
- 2 Insert a DVD+RW/+R on which you want to store the selected titles

Please ensure that:

- •) the DVD+RW was not protected against accidental recordings. For more information, read the next section 'Preventing accidental erasing of discs'.
- •) there is enough space for all selected titles at the end of the DVD+RW/+R.
- 3 Press BROWSER HDD.
 - → The media browser appears with an overview of all recordings on the HDD.
- Select the title you want to copy on the DVD+RW/+R using ▼ ,
 - If you want to archive several titles at a time, mark the desired titles with SELECT.

What is the order of archiving?

The titles will be transferred to the DVD+RW/+R in the same order as they where selected using the **SELECT** button.

5 Start the archiving process by pressing the green function button.

If this button is not visible on the screen, check if this title is available in the 'Time shift Buffer'. If necessary switch of the set using **STANDBY** O or use the '*Flush Buffer*' function (button **SYSTEM MENU**, menu 'Set up')

- → A message indicating the process appears both on the screen and in the display.
- During and after the archiving process, you see the TV show of the currently selected TV channel. The buttons ◀, ▶, JUMP BACK, JUMP FWD, PLAY ▶, PAUSE II are without function during archiving. Timer recordings will take place.

Interrupt the process

Press the yellow function button. If necessary call up the information on the screen using the **INFO** button.

Finalising a DVD+R

If recordings were stored (archived) on a DVD+R you have to finalise it to make play back in a DVD-Player possible.

- Press **DISC MENU** and then **STOP** to mark the first title.
- Press **\(\Lambda \)** to go to the 'disc info screen'
- Press ▶ and select then the line 'Finalise disc' using ▼.
- Confirn with OK .

Protect disc against accidental recordings

To prevent an accidental erasing of important recordings, you can protect the entire disc. It is only possible to protect the entire disc. Protecting specific recordings on a disc is not possible.

What happens with DVD+R discs?

As long as these discs are not finalised, you can protect them against accidental recording.

- 1 Insert the disc to be protected.
- 2 Press STOP on the remote control while the index screen is displayed.
 - → The first title is highlighted.
- 3 Press ▲.
 - This takes you to the disc info screen.
- 4 Press ► . Select 'Protection'.

Confirm with ▶ .

- **5** Select '*Protected*' using ▼ and confirm with **OK**.
- 6 Press ◀ and then DISC MENU to terminate.
 - → The entire disc is now protected. If you attempt to record on a protected disc, 'I' 5E LOEK' will appear on the display and 'Disc locked' on the screen.

If you decide later to record on this disc again, repeat the above steps but select 'Unprotected' at step 5.

Playback from a disc

General notes on playback

With this DVD recorder you can play back the following systems:

- •) DVD Video
- •) (Super)Video CD Disc
- •) DVD+RW Disc
- •) DVD+R Disc
- •) DVD-RW (video mode, finalised)
- •) DVD-R
- •) CD-R
- •) CD-RW
- •) Audio CD
- •) MP3-CD

You can operate the video recorder using the remote control or the buttons on the front of the DVD recorder.

× The display will read '₽'N'

✓ The child lock has been activated for the inserted disc. Read the sections on 'Child lock' and 'Releasing a disc' in the chapter on 'Access control (child lock).

* The menu on the screen is showing an 'X'

✓ Some DVD discs can be manufactured so that certain steps are required before the disc can be played, or so that only limited operation is possible during playback. When an 'X' appears on the screen the selected feature is not possible.

* The screen is showing regional code information

- ✓ Since DVD films are not normally released in all parts of the world at the same time, all DVD players have a specific regional code. Discs can be given a regional code. If the regional codes differ between the player and the disc, playback is not bossible.
- ✓ The regional code is shown on the label on the back of the machine.
- ✓ The regional code does not apply to recordable DVDs.

× I can see the message 'EMPTYIIISE'

✓ The disc does not contain any recordings.

* 'IIISE ERR' will appear on the display

✓ Recording could not be completed correctly because of a disc error. Check the disc and clean it if necessary.

* A dialog box appears asking you whether you want to delete the contents or eject the disc

✓ The disc inserted is a DVD+RW but its contents are not DVD video-compatible (e.g. a data disc). Recordings on this disc can only be made if the entire disc is first deleted with the REC/OTR ● button.

Switch over to the actual TV channel during playback

As soon as you turn on the DVD recorder, the currently selected TV channel on the DVD-Recorder is recorded in a temporary storage (Time shift Buffer).

Recordings in the time shift buffer will be automatically deleted e.g. after 3 hours if the period of the time shift buffer is set to 3 hours (factory setting).

You can play back a disc, while the current TV show is still being recorded.

1 To interrupt playback from a disc, press TUNER

→ You will see the TV-show from the selected TV channel on the DVD-recorder

O To continue playback, from the disc press DISC MENU.

Inserting a disc

1 Press the OPEN/CLOSE button on the front.



- → The disc tray will open. While the disc tray is opening, the display shows '□PENING' and then '¬TRAY □PEN' when the tray is fully open.
- 2 Carefully place the disc in the tray with the label facing up and press PLAY ► or OPEN/CLOSE ▲.
 - → 'ELUSINS' and then 'RERIINS' will appear in the display. The information on the disc will be read.

How do I insert a double-sided DVD?

Double-sided discs do not have labelling over the whole surface. The labelling for each side is in the centre of the disc. To play a side its label must be facing up.

Opening/closing the tray using the remote control

You can open and close the disc tray using the remote control.

Press and hold the STOP ■ button on the remote control until the dialog box shows '□PENING' or '□L□SING'.

Playing a DVD video disc



A menu may appear when a DVD is played back. If the titles and chapters are numbered, press a number button on the remote control.

- O You can also use the ◀ , ▶ , ▲ , ▼ buttons or number buttons 0..9 to select a menu item and confirm with OK .
- You can also access the menu using DISC MENU on the remote control.
- 1 If playback does not start automatically, press PLAY ►.
 - → title/chapter number, elapsed time will appear on the display.



- To stop playback, press STOP on the remote control or on the DVD recorder.
- 3 To remove the disc, press OPEN/CLOSE on the front of the DVD recorder.

Playback from a disc

Playing a DVD+RW/+R disc



1 If the disc is write-protected or a finalised DVD+R disc, playback starts automatically.



2 If playback does not start automatically, use the ▼ or ▲ button to select the title you want to play on the index screen. You can also use the DOWN or UP button on the front.

With \bowtie , \bowtie you can jump to the begin or the end of the index screen.

- 3 Press the PLAY ▶ button.
 - → title/chapter number, elapsed time will appear on the display.
 - * I can see the message 'EMPTYIII'5['
 - ✓ The disc does not contain any recordings.
- **4** To stop playback, press **STOP** on the remote control or on the DVD recorder.
- **5** To remove the disc, press **OPEN/CLOSE △** on the front of the DVD recorder.

Playing an audio CD



You can also use the DVD recorder to play audio CDs

If the TV is on, the audio CD screen appears automatically. During playback, the current track number and its elapsed playing time will show on the TV screen and on the recorder display.

- 1 Insert an audio CD.
 - → Playback starts automatically.
- 2 Stop playback using STOP ■.
 - The number of tracks and the total time are displayed.

Playing an MP3 CD

MP3 (MPEG1 Audio Layer-3) files are highly compressed music files. Using this technology the data volume can be compressed by a factor of 10. This means it is possible to record 10 hours of music in CD quality on a single CD-ROM.

When creating MP3 CDs please note the following:

File system: ISO9660

Directory structure: maximum of 8 levels

Formats: *.mp3

Filenames: maximum of 12 characters (8+3)

Maximum of 32 albums, 999 titles

Supported sampling frequencies: 32, 44.1, 48 (kHz). Music with sampling frequencies other than these will be skipped. Supported bit rates: 32, 64, 96, 128, 192, 256 (kbit/s) ID3 Tag: Version I, I.I. In later versions the directory name is displayed as the album and the filename as the title.

Important notes for playback:

Only the first session of a multi-session CD will play back.

- 1 Insert an MP3 CD.
 - → Playback starts automatically.

MP3 CD display

If the TV is on, the MP3 CD screen appears automatically.

During playback, the current track number and its elapsed playing time will be shown on the TV screen and on the recorder display.

During stopped playback (STOP ■ button) the numbers of the albums will be shown on the TV screen and on the display.

Further information on the album, track and artist will also be displayed if included in the ID tag.

- 2 Stop playback using STOP ■.
 - The number of albums is displayed in the display.
 - O Using I or ▶ select the next or previous title.
 - O You can also use the T/C button to select titles and albums.
 - Press the **T/C** button and use the **▶** or **◄** button to select the 'T' symbol for title or 'C' for chapter. Use the **▼** or
 - ▲ buttons or the number buttons 0..9 on the remote control to select the number of the title/chapter.
 - O You can also use the repeat functions (SELECT button).

Playback from a disc

Playing a (Super) Video CD



(Super) Video CDs may be equipped with PBC (Play Back Control). This means that special playback functions (menus) can be directly selected. The video CD must be PBC compatible (see CD case). 'PBC' is active in the default settings.

- 1 Insert a (Super) Video CD.
 - → If the '■' symbol appears in the display, start playback by pressing PLAY ► .
 - O If a menu appears on the screen, use the remote control buttons indicated on the screen to select the menu option you want (PREV= I◀◀ , NEXT= ▶▶I) or with the number buttons 0..9.
 - O If a PBC menu consists of a list of titles, you can select a title directly.
 - O Use RETURN to go back to the previous menu
- 2 Stop playback using STOP ■.

Additional playback features

General

DVD's are divided in titles and chapters.

- O During playback, press ►►I to go to the next title. If there are several chapters within a title, the next chapter.
- O Press

 ✓ to return to the start of the current title/chapter.
- O Press I◄◀ twice to return to the start of the previous title/chapter.

Use the T/C (title/chapter) button

- Press $\mathsf{T/C}$ (title/chapter) and then use \blacktriangle or \blacktriangledown to select the appropriate title.

Make sure the symbol 'T' (title) is selected in the menu bar.

- Use T/C to select chapters within a title. Press T/C and use \blacktriangleright to select the 'C' symbol (chapter).

Now select the appropriate chapter with \blacktriangle or \blacktriangledown .

Searching a disc

You can search the disc for a recording at 4x, 8x or 32x playback speed. Other speeds can only be selected via the menu bar (').

- 1 During playback, press and hold I◀ (reverse) or ►► (forwards) to switch to the search feature.
 - O You can switch between the playback speeds using |◀◀ /▶▶| .
- 2 To continue playback, press PLAY ► at your chosen location.
 - × No sound
 - ✓ The sound is switched off in search mode. This is not a fault in your
 machine.

Search feature via menu bar

- During playback press **SYSTEM MENU** on the remote control. The menu bar will appear at the top of the screen.
- Select the $\blacktriangleright \blacktriangleright$ 'symbol using \blacktriangleright or \blacktriangleleft and confirm with \blacktriangledown .
- You can now use the ◀ or ▶ button to select different forward and backward search speeds.
- If necessary, switch the menu bar off with the **SYSTEM MENU** button.
- To continue playback, press **PLAY** ► .

Still picture

1 During playback, press PAUSE II to stop playback and display a still picture.



Frame advance via menu bar

- During a still picture press **SYSTEM MENU** on the remote control. The menu bar will appear at the top of the screen.
- Select the ' \P ' symbol using \triangleright or \P and confirm with \P .
- You can now use the ◀ or ▶ button to go forwards or backwards one frame at a time.
- If necessary, switch the menu bar off with the **SYSTEM MENU** button.
- 2 To continue playback, press PLAY ►.

Slow motion

- 1 During playback press PAUSE II on the remote control. Now hold down I◀◀ or ▶▶I to switch to slow motion.
 - O You can switch between different speeds using I◀◀ or ▶▶ .

Slow motion via menu bar

- During playback press $\,$ PAUSE II $\,$ and then $\,$ SYSTEM MENU on the remote control. The menu bar will appear at the top of the screen.
- Select the igstar' symbol using igstar or igstar and confirm with igstar .
- You can now use the ◀ or ▶ button to select different forward and backward slow motion speeds.
- If necessary, switch the menu bar off with the **SYSTEM MENU** button.
- 2 To continue playback, press PLAY ► twice.

Additional playback features

Search by time

Using this feature you can select where playback should start (select elapsed time).

- 1 During playback press SYSTEM MENU on the remote control.
 - → The menu bar will appear at the top of the screen.
- 2 Select the '₽' symbol using ▶ or ◀ and confirm with ▼.
 - → Playback is stopped and a box appears on the screen showing the elapsed time.
- 3 Enter the start time with the digit keys 0..9 from where playback should start.
- 4 Confirm with OK.
 - × The time entered will flash on the screen
 - ✓ The selected title is shorter than the time entered. Enter a new time
 or cancel the function by pressing SYSTEM MENU.
- 5 Playback starts at the time you entered.

Repeat/Shuffle play

You can mark entire sections or the whole disc for endless playback. Depending on the type of disc (DVD video, DVD+RW, video CD) you can select a chapter, title or the entire disc.

- 1 Select the desired chapter, title or the entire disc and start playback.
- 2 During playback, press **SELECT**. By pressing **SELECT** again you can chose from the following options:
 - •) ' chapter (DVD only)
 - •) '__title__': repeat track/title
 - •) ' repeat entire disc (Video CD, Audio CD only)
 - •) 'shuffle ': Shuffle
 - •) Display disappears: no repeat
- 3 To end the repeat, press the STOP button.
 - You can also keep pressing the SELECT button until the displays disappear.

Repeating a passage (A-B)

You can repeat a particular passage within a title/chapter. You need to indicate the start and end of the passage.

- 1 During playback press PAUSE II at the start point.
 - → You will see a still picture.
- 2 Keep pressing SELECT until ' appears on the screen.
 - → The start point is now saved.
- Press PLAY ► to start playback.
- 4 When the end point is reached press **OK**.
 - → '-\frac{A-B}{\sigma}' appears on the TV screen.

 Playback now takes place within these points.
- **5** To end the repeat, press the **STOP** button.
 - O You can also keep pressing the **SELECT** button until the displays disappear.

Scan feature

This feature plays back the first 10 seconds of each chapter (DVD) or track (CD).

- 1 During playback, press SELECT . Select 'scan using SELECT .
 - → After 10 seconds the DVD recorder switches to the next chapter/index.
 - O To start playback at the relevant chapter/index press STOP and then PLAY ►.

Additional playback features

Camera angle

If a DVD contains scenes that have been shot from different camera angles you can select these camera angles for playback.

- 1 During playback, press PAUSE II .
 - → You will see a still picture.
- 2 Press SYSTEM MENU and select the '□ 'icon using .
 - × The '□ 'symbol will be hidden
 - ✓ The selected scene has been shot from only one camera angle. This
 feature is therefore not available. For more information please read
 the cover of your DVD disc.
- 3 Select the required camera angle with ∇ or \triangle .
 - O You can also directly enter the number with the number buttons 0..9.
 - After a short time, playback will resume from the new camera angle.

The 'c't symbol will remain visible until a scene starts for which there is only one camera angle.

Zoom feature

The Zoom feature allows you to enlarge the video image and pan through the enlarged image.

- 1 During playback, press PAUSE II .
 - → The DVD recorder switches to 'PAUSE'. You will see a still picture.
- 2 Press SYSTEM MENU and select the 'T' icon using .
- **3** Select the required zoom factor using ∇ or \triangle .
 - → When 'press OK to pan' appears on the screen, the zoom process is complete.
- Press OK . Using ▲ , ▼ , ▶ , ◀ select the part of the image you wish to view.
- 5 Confirm with OK.
- 6 To stop the feature, press PLAY ► and then SYSTEM MENU.

Select the audio language

Many pre-recorded DVD discs have more than one audio language. The language initially selected for playback will be the one you selected when you first set up the DVD recorder. However you can change the audio language of the inserted disc at any time.

You can change the audio language either using the menu of the inserted disc (**DISC MENU** button) or the DVD recorder's menu bar (**SYSTEM MENU** button). The audio languages for DVD playback in the two menus may be different. Please note that with some DVDs the audio language and/or subtitle language can be changed only via the DVD menu.

- 1 During playback press SYSTEM MENU and select the '((⟨`' icon using ▶ .
- 2 Select the required audio language using ▼ or ▲.
 - **O** You can also enter the number directly using the number buttons 0..9.
 - → Play continues in the new audio language.

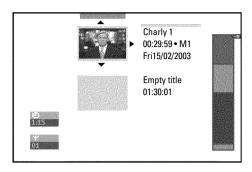
Subtitles

Many pre-recorded DVD discs have more than one subtitle language. The language initially selected for playback will be the one you selected when you first set up the DVD recorder. However you can change the subtitle language of the inserted disc at any time.

You can change the subtitle language either using the menu of the inserted disc (**DISC MENU** button) or the menu bar (**SYSTEM MENU** button). The subtitle languages in the menus may differ.

- 1 During playback press SYSTEM MENU and select the '.....' icon using ▶ .
- 2 Select the required subtitle language using ▼ or ▲ .
 - O You can also enter the number directly using the number buttons 0..9.
 - O You can switch off subtitles again with 0 or by pressing 'off.
 - → Playback continues in the new subtitle language.

General



When a recording is made to disc, the following additional information is also stored at the beginning of the recording:

•) Name of the recording

If a name has not been assigned to the TV channel, only the programme number and time are stored as the name

- •) Length of the recording
- •) Record type (Quality)
- •) Date of the recording
- •) Index picture of the recording

A marker will be set every 5-6 minutes if the 'Auto chapters' function is activated in the 'Record settings' menu. This marker is known as a 'chapter'.

These markers can be changed when the recording has finished.

Can markers be set on a DVD+R disc?

Markers can be set on these discs if they have not been finalised.

It is also possible to add 'chapters' later. This means that scenes you do not want to see during playback can be hidden or skipped. During playback you can watch your recording as a continuous sequence without the hidden chapters.

Favorite Scene Selection

In this menu you can adapt a title to suit your particular needs. You can insert/delete chapter markers, hide chapters, select a new index, or split up a title.

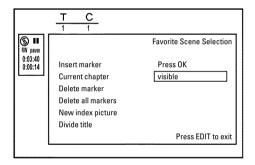
In this menu you can adapt a title on a DVD+RW/+R to suit your particular needs.

You can insert/delete chapter markers, delete all chapter markers, or split up the title. Press **EDIT** on the remote control during recording to open this menu.

Insert chapter markers

During recording, you can set or delete chapter markers within a title. The maximum number of chapters per disc is 255 and 99 per title. If one of these limits is reached the following message will appear on the screen: 'Chapter limit'. You need to delete some markers before you can insert new ones or make recordings.

- During playback, press **EDIT** on the remote control at the appropriate point.
 - → The 'Favorite Scene Selection' menu appears on the TV screen.



- Confirm 'Insert marker' by pressing OK.
 - → 'Inserting marker' appears on the TV screen.

'X' will appear on the screen:

This DVD is write-protected or the disc is a finalised DVD-R. Subsequent changes cannot be made.

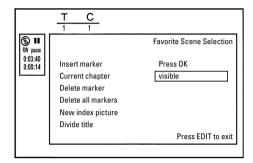
3 To stop this function, press **EDIT** .

Hiding chapters

Initially, all the chapters are visible. You can hide chapters for playback (e.g. unwanted scenes) or make them visible again. In editing mode, hidden chapters are shown darker.

A chapter always consists of a start marker and an end marker. To hide a certain scene, proceed as follows:

Search the beginning of the scene you want to hide. Press
PAUSE II
.



- 2 Press EDIT on the remote control to call the 'Favorite Scene Selection' editing menu.
- 3 Set the start marker using OK.
 - → The number of chapters ('C') in the menu line will increase by one.
- 4 Search for the end of the scene.
 - O You can also use ►►I or I◄◄ to search faster for the end of the scene.

Make sure that you do not jump into the next title (title number 'T' must not change).

- Only chapters within a title can be hidden.
- 5 Press PAUSE II at the corresponding position.
- 6 Set the end marker with **OK** . This will also be the start marker of the next chapter.
 - The number of chapters ('C') in the menu line increases by one.

The number of chapters ('C') has increased by two or more numbers

- √ This is the case when you want to hide a chapter that, due to
 automatic chapter numbering (if switched on), stretches over two or
 more chapters. In this case, you must delete the start of the
 automatically generated chapter:
- Press T/C twice while the editing menu is displayed to change the chapter number.
- Select the chapter between the new markers using ▼ or ▲ . Press PAUSE II .
- Select 'Delete marker' with ▼ to delete the current chapter marker. Confirm with OK . The current chapter number decreases by one
- Press T/C twice to change the chapter number 'C'.
- 8 Select the previous chapter with ▼, since you are already in the next chapter (end of the chapter is also the beginning of the next chapter).
- 9 Wait until the chapter has been played and press PAUSE II to stop playback.
- Select 'Current chapter' using ▼ or ▲ .
- **11** Using ▶ select '*hidden*'.
 - The picture is shown darker.

Switching quickly

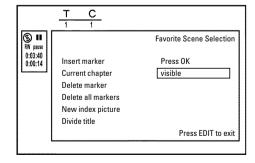
You can switch between show chapters ('**visible**') and hide chapters ('**hidden**') quickly and easily using **SELECT**.

This function is independent from the selected line.

12 To end, press EDIT.

Deleting chapter markers

Within a title you can delete either all markers or individual markers.



- 1 While the relevant chapter is playing, press EDIT on the remote control.
 - → The 'Favorite Scene Selection' menu appears on the TV screen.

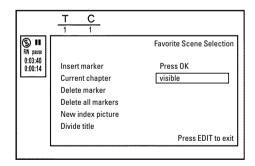
How can I select different chapters?

- Press the **T/C** button on the remote control. Titles and chapters are displayed at the top of the screen.
- Select title (T) or chapter (C) with \triangleright or \triangleleft .
- Use ▲ or ▼ to select the title/chapter channel you want to edit.
- 2 Use ▼ to select:
 - O line Delete marker for this chapter
 - O line 'Delete all markers' for all chapters within the selected
- 3 Confirm with OK.
 - O You will be prompted to press OK again to make sure you really want to delete all markers.
 - O If you do not want to, press the ◀ button.
- 4 To end the menu, press EDIT.

Changing the index picture

Normally the picture from the beginning of a recording is used as the index picture. You can however choose any picture from the recording as the index picture.

- 1 During playback, search for location of the new index picture. Press the PAUSE II button.
- 2 Press the EDIT button.
 - → The 'Favorite Scene Selection' menu appears on the TV screen.



- 3 Select line 'New index picture' and confirm with OK.
- 4 Start the change with OK.
 - → 'Updating menu' appears on the TV screen.

Once the revision has been completed successfully the DVD recorder reverts to the index overview.

Dividing titles

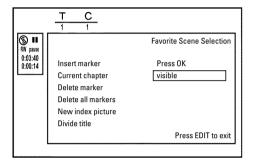
You can divide a title into several sections (titles) of any size. Each of these sections (titles) is identified by its own index.

Note: This division cannot be undone.

Can I divide titles on DVD+R discs?

As recordings on DVD+R discs cannot be overwritten, it is not possible to divide titles on DVD+R discs.

- 1 While the relevant title is playing, press EDIT on the remote
 - → The 'Favorite Scene Selection' menu appears on the TV screen.

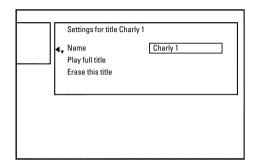


- 2 Select 'Divide title' and confirm with the OK button.
- 3 If you are sure, press **OK** to start the process.
 - → 'Dividing title' appears on the TV screen.
- 4 Wait until the new title is displayed with an index picture in the index picture overview.

The process of splitting the title is now complete.

Editing recording titles (name)

- 1 If required, press the STOP button to interrupt playback.
- 2 Using ▲ or ▼ select the title whose name you want to edit and confirm with ▶ .
 - → The menu for editing names appears.



- **3** Select '*Name*' using \triangle or ∇ and confirm with \triangleright .
- **4** Using ▶ or ◀ select the position where the letter/number/icon is to be changed/re-entered.
- **5** Change the icon using \triangle or \bigvee .
 - O You can switch between upper and lowercase using **SELECT**.
 - O You can delete the character using the red function button.

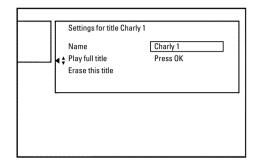
How can I enter the characters with the buttons 0..9?

- Repeat 4 and 5 until you have made the changes you want.
- 7 Save the new name with **OK**.
 - → 'Storing name' appears on the TV screen for confirmation.
- 8 To end, press ◀.

Playing the entire title

If you have hidden certain sections (chapters) of a title, this setting lets you watch the entire title including the hidden sections. To do this, proceed as follows:

Press the STOP ■ button or during playback press DISC MENU.



- Using ▲ or ▼ select the title you want to play all of and confirm with ▶ .
 - → The title editing menu will appear.
- **3** Select 'Play full title' using \triangle or ∇ and confirm with **OK**.
 - → Playback starts automatically. The title is played in its entirety including the hidden chapters.

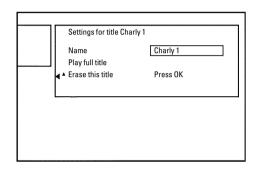
Erasing recordings/titles

You can erase specific recordings from a disc.

Please note: If there is an '*Empty title*' between titles, this space can not be used from this DVD-Recorder.

Each recording from the HDD to a DVD+RW/+R (archiving) will be added at the end of existing recordings

- 1 Press the STOP button or during playback press DISC MENU.
- Using ▲ or ▼ select the title you want to delete and confirm with ▶ .
 - → The title editing menu will appear.



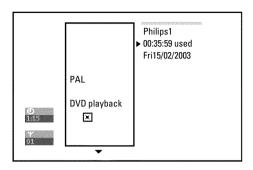
- 3 Select 'Erase this title' using ▲ or ▼ and confirm with OK.
 - → 'This will completely erase this title'. 'Press OK to confirm' appears on the TV screen.
 - O If you want to delete this title, press OK to confirm.
 - O Otherwise press ◀.
- 4 'Erasing title' appears on the TV screen.
- 5 At this point '*Empty title*' appears in the 'index picture display'. A new recording can now be made here.

If the deleted title was very short (less than I minute) '*Empty title*' will not appear at this point.

Can titles be deleted from a DVD+R disc?

Titles on DVD+R discs are only marked as deleted. 'Deleted title' will appear in the display instead of 'Empty title'. During playback the 'deleted' title is skipped. The space used for this title cannot be used again as the title has not been physically deleted. Once the disc has been finalised no further changes can be made.

Disc settings



This screen appears **before** the first title and contains general information about the current disc.

You can:

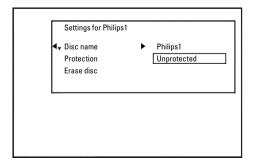
- •) change the name of the disc
- •) activate or deactivate write protection on the disc
- •) Finish editing (make the disc DVD compatible)
- •) finalise a DVD+R
- •) delete a DVD+RW

To get to this display, proceed as follows:

- 1 Press the STOP button or during playback press DISC MENU.
- 2 Select the first title with ▲ or press STOP . STOP .
- 3 Press ▲.
 - → The disc info display will appear.

Changing the disc name

- 1 In the 'Disc info display' press ▶.
 - → The 'Settings for' menu appears on the TV screen.



- 2 Select '*Disc name*' using ▲ or ▼ and confirm with ▶ .
- 3 Using ▶ or ◀ select the position where the letter/number/icon is to be changed/re-entered.
- 4 Change the icon using \triangle or ∇ .
 - You can switch between upper and lowercase using SELECT.

- O You can delete the character using the red function button.
- 5 Repeat 3 and 4 until you have made the changes you want.
- 6 Save the new title with OK.
 - → 'Storing name' appears on the TV screen for confirmation.
- **7** To end, press **4**.

Finishing editing

If one or more titles have been edited a DVD player may still display the original titles. You can prepare your DVD+RW disc in such a way that a DVD player will be able to play the edited version.

- 1 In the 'Disc info display' press ▶ .
 - → The 'Settings for' menu appears on the TV screen.
- 2 Select 'Make edits compatible' using ▲ or ▼ and confirm with OK.
 - × 'Make edits compatible' does not appear
 - ✓ Your disc is already compatible. There is no need for conversion. To end, press SYSTEM MENU .
- 3 The screen displays '*This will take*' to show how long the process will last.
- 4 To confirm press OK.
 - → 'Working...' appears on the TV screen.
 - → bar will move from left to right indicating progress.

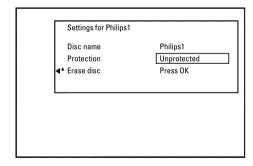
Finalising DVD+R discs

This feature is required to play back a DVD+R disc in a DVD player. Once the disc has been finalised no further recordings or changes can be made.

- 1 In the 'Disc info display' press ▶.
 - → The 'Settings for' menu appears on the TV screen.
- 2 Select 'Finalise disc' using ▲ or ▼ and confirm with OK.
 - × 'Finalise disc' does not appear
 - ✓ Either there is no DVD+R disc inserted or the disc is already finalised. To end, press SYSTEM MENU .
 - * The 'Settings for' menu does not appear
 - ✓ The menu may not appear if the disc has been recorded on another DVD recorder. In this case, use the 'Finalise disc' feature in the 'T\',' menu, under 'Features'.
- The screen displays '*This will take*...' to show how long the process will take.
- 4 To confirm press **OK**.
 - → 'Working...' appears on the TV screen.
 - → A bar will move from left to right indicating progress.

Erasing DVD+RW Disc's

- 1 In the 'Disc info display' press ▶.
 - → The 'Settings for' menu appears on the TV screen.



- 2 Select 'Erase disc' using ▲ or ▼ and confirm with OK.
 - → 'This will erase all titles Press OK to confirm' appears on the TV screen..
- 3 If you want to delete all the titles, press **OK** to confirm. Otherwise press ◀ .
 - → 'Erasing disc' appears on the TV screen. After deletion, the index picture display shows the free space on the disc.

If the disc is empty already, you cannot select 'Erase disc'.

Disc Manager (DM)

General information

The 'Disc Manager' is an integrated database in the DVD recorder that remembers all recordings on DVD+RW/+R discs made by this DVD recorder. This gives you a complete overview of your entire video collection at the touch of a button. The Disc Manager gives you quick and easy access to every recording **made on with this DVD recorder**. The Disc Manager also tells you which film was recorded on which disc and how many unrecorded minutes remain on the discs. And: You can go automatically to the beginning of the selected recording and start playback.

How many discs can I save in the Disc Manager?

You can store up to 999 discs on this DVD recorder. The maximum number of titles is more than 9,000. The maximum number of titles per disc is 49.

Caution when recording with other DVD recorders

Don't use a disc stored in the Disc Manager for recording on other DVD recorders. If you use a disc to record on another DVD recorder, then this disc will no longer be recognised by the Disc Manager. In this case, delete the disc from the Disc Manager's memory and then add it after it has been recorded.

Adding 'child-proof discs'

If you want to add child-proof discs you need to enter the PIN code.

Adding a disc to the Disc Manager

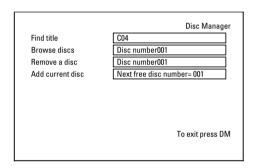
You can only add DVD+RW or DVD+R discs to the Disc Manager since other discs do not hold any information on the titles or lengths of the recordings. These discs have to be at least once recorded in the DVD-Recorder. A table of content have to be available. DVD+R discs can also be finalised. Other discs cannot be added to the Disc Manager.

Recordings are saved automatically

On a disc that has been added to the Disc Manager, you can make new recordings as often as you like using this DVD recorder. The titles of these recordings will be stored in the Disc Manager automatically.

Preparation:

- •) The TV set is switched on, and if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- Insert the DVD+RW/+R disc that you want to add in the DVD recorder.



- When I insert a disc I see a number on the screen in the index picture screen in the top left-hand corner
- ✓ You have inserted a disc that has already been registered by the Disc Manager.
- 2 Press the DISC MANAGER button on the remote control.
- **3** Select 'Add current disc' using \triangle or ∇ and confirm with \triangleright .
- 4 Confirm with OK.
 - → The disc number will be added to the Disc Manager.
 - The disc number is then displayed and the disc tray opens automatically.

The disc is now stored in the Disc Manager under the displayed disc number.

Please write this number on the disc and on the cover.

Why do I need to label the discs?

When searching for unrecorded free space or available recordings, you will asked to insert the appropriate discs (disc numbers).

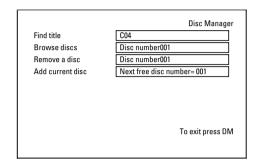
5 To end, press DISC MANAGER.

The DVD recorder will immediately recognise that this disc is saved in the Disc Manager. When this disc is inserted the disc number will appear in the title overview in the top left-hand corner.

Removing discs from the Disc Manager

Every DVD+RW/+R is stored with a number in the Disc Manager (DM). You can remove this disc number from the Disc Manager to use the Disc Manager's memory for new discs or to remove damaged discs from memory.

- 1 Press DISC MANAGER on the remote control.
- 2 Select 'Remove a disc' using ▲ or ▼ and confirm with ▶ .



3 Select the disc number with \blacktriangle or \blacktriangledown and confirm with OK .

Disc contents are not deleted.

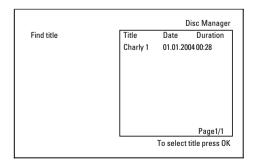
The disc is only removed from the Disc Manager's memory. Its contents remain unchanged.

4 To end, press DISC MANAGER.

Searching for a title in the Disc Manager

This function can be used to quickly and easily find and play back a recording saved in the Disc Manager.

- 1 Press DISC MANAGER on the remote control.
- **2** Select '*Find title*' using ∇ or \triangle and confirm with \triangleright .
 - A list of the titles of all recordings stored in the Disc Manager (DM) will appear on the TV screen.



What do the displays on the screen mean?

'Title' = Title

'Date' = Date of the recording

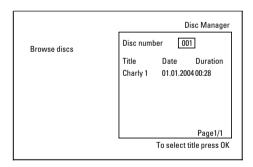
'Duration' = Length of the recording

- 3 Select the title that you want to play back with ∇ or \triangle .
- 4 Confirm with **OK**.
 - → The DVD recorder will jump to the start of the selected recording.
 - * I see the message 'Insert disc number' on my screen
 - √ The selected recording is located on the Disc Manager disc with the displayed disc number. Please insert the appropriate disc. After a brief check, the DVD recorder will jump to the start of the selected recording.

Searching discs

You can easily search for the title of a recording stored in the Disc Manager. To do this, the appropriate disc does not have to be in the DVD recorder.

- 1 Press DISC MANAGER on the remote control.
- 2 Select 'Browse discs' using ▼ or ▲ .
- 3 Confirm with ▶.
 - → The screen will show the contents of the last Disc Manager disc used.



4 Use ▲ or ▼ to select a different disc number if necessary and confirm with ▶ .

What do the displays on the screen mean?

'Title' = Title

'Date' = Date of the recording

'Duration' = Length of the recording

- 5 Press ▲ or ▼ to select the desired title.
- 6 Confirm with **OK**.
 - → The DVD recorder searches for the start of the appropriate recording.
 - * I see the message 'Insert disc number' on my screen
 - The selected recording is located on the Disc Manager disc with the displayed disc number. Please insert the appropriate disc.

User preferences for the HDD

General

This section describes how you can adjust the functions of the HDD to your personal preferences.

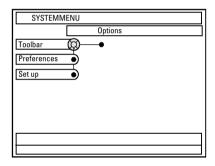
When you press SYSTEM MENU, a so-called puck '@' appears on a line

Preparation:

- Switch on the TV set and, if necessary, select the programme number for the DVD recorder.
- •)Switch on the DVD recorder.
- 1 Press TUNER on the remote control to switch to HDD mode.

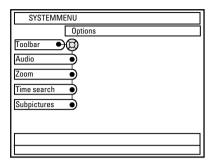
You can also switch to HDD mode by pressing **BROWSER HDD** but you will not see the picture of the currently selected TV channel as a background picture.

- 2 Press SYSTEM MENU on the remote control
 - The system menu for the HDD appears.



- 3 Select the corresponding line using ∇ or \triangle .
 - O If the arrow ▶ in the puck '@' is visible in one of the lines, you can select additional functions with ▶ on the remote control.
 - O To return to the previous menu, keep pressing ▲ until the top menu item is selected.
 - Press ◀ to return to the previous menu item.
- Select the corresponding function using ▼ or ▲ , or the setting with ◀ or ▶ . Select the functions you want to change as described in the following pages.
- **5** Confirm the new setting with **OK**.
- 6 Close the menu item with ◀ .

Toolbar



Options

In this menu, you can choose functions for the playback of recordings (titles) on the HDD:

'Audio'

Selection of the language for the TV show currently selected on the DVD recorder

'Lang I' or 'Lang II' in the display also indicates whether a TV show is broadcast in two languages. This setting only affects playback through the internal tuner of the DVD recorder. The setting for the programmed recording (Timer) will not be affected.

If you also want to use/change the language for the programmed recording, you must change the language in the '*Preferences*' menu (setting '*Language*').

O 'Lang. I'

Playback is carried out in the original or main language. 'Lang I' also appears in the display.

O 'Lang.II

Playback is carried out in the dubbed language available. 'Lang II' appears in the display.

'Zoom'

Using this function, you can enlarge (blue function button) or reduce the size (yellow function button) of the still picture or pan through the enlarged picture using \blacktriangledown , \blacktriangle , \blacktriangledown during playback from the HDD (time shift buffer or media browser).

Press the red function button to stop this function.

'Time search'

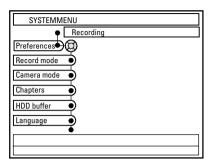
Using this feature, you can search a position by time. You can use this feature both for titles in the media browser and for playback from the time shift buffer.

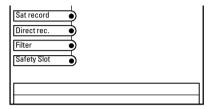
'Subpictures'

This function is only required if recordings were made through a video camera connected to the **DV IN (CAM2)** socket. In this case, you can display/hide information on the date and time of the recording.

User preferences for the HDD

Preferences





Recording

In this menu, you can select one of the following functions for recording:

I can not select some functions

During a recording the selection of some functions are not possible. e.g. 'HDD buffer'.

'Record mode'

Select from the settings displayed the record mode (picture quality of the recording). MI, M2x, M3,... M8.

For recordings on a DVD+RW/+R (archiving function) always the recording mode used for the recording on the HDD will be taken. Observe the maximum possible recording time on a DVD+RW/+R. The maximum possible recording time on the HDD depends from the recording mode and the average length of the recordings (titles).

O 'M1'

High Quality (high recording quality) offers the best picture quality and a recording time of: DVD+RW/+R: I hour.

HDD: approx. 16 hours

O 'M2'

Standard Play (pre-recorded DVD quality) offers standard picture quality and a recording time of:

DVD+RW/+R: 2 hours. HDD: approx. 32 hours

O 'M2x'

Standard Play plus (better than S-VHS quality) offers standard picture quality and a recording time of:

DVD+RW/+R: 2,5 hours. HDD: approx. 40 hours

Long Play (S-VHS picture quality).

Recording time of: DVD+RW/+R: 3 hours. HDD: approx. 48 hours

O 'M4'

Extended Play (better than VHS picture quality).

Recording time of: DVD+RW/+R: 4 hours.

HDD: approx. 64 hours

Super Long Play (VHS-picture quality).

Recording time of:

DVD+RW/+R: 6 hours.

HDD: approx. 96 hours if the average recording time for a title is at least 20 minutes.

O 'M8'

Super Extendend Play (VHS-LP-picture quality).

Recording time of:

DVD+RW/+R: 8 hours.

HDD: approx. 130 hours if the average recording time for a title is at least 20 minutes.

'Camera mode'

Select the recording mode (picture quality for recording) from one of the displayed settings for the recording from external sockets. M1, M2x, M3,... M8. Read the previous section (Record Mode) on the picture quality that corresponds to each setting.

'Chapters'

O 'Off'

No auto chapters

'On'

Automatic chapter marking after 5 minutes.

'HDD buffer'

Choose one the displayed settings to define how long a recording will be kept stored.

O 'Ih'

The recording will be kept stored for I hour

The recording will be kept stored for 6 hours

'Language'

Here you can set the default language to be used for the programmed recording of bilingual TV shows. You can no longer change the language once playback has started.

O 'Lang. I'

Recording is carried out in the standard language.

O 'Lang.II'

Recording is carried out in the dubbed language available.

'Sat record'

If a video signal is detected at the EXT2 AUX-I/O scart socket, recording will begin.

Sat Record is activated.

'Off:

Sat Record is deactivated.

User preferences for the HDD

'Direct rec.'

If a recording starts while the DVD recorder is switched off, the TV channel currently selected on the TV set will be compared with the TV channels stored in the DVD recorder.

- If the TV channel is found, recording will start.
- If the TV channel is not found, a message will appear on the screen and in the display.
 - O 'On':

Direct Record is activated.

O 'Off':

Direct Record is deactivated.

'Filter'

Here you can choose between:

I can not select this function

Check the actual record mode selected. This function is available in the record modes 'M4' to 'M8' only.

O 'Sport':

Picture quality is optimised for rapid movements in the recording modes (picture qualities) M4 to M8. Please observe that this setting will reduce the overall impression of the picture quality.

O 'Normal':

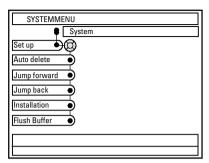
Better overall picture quality.

Please observe that this setting may cause picture artefacts (MPEG artefacts) to appear in rapid movements.

'Safety Slot'

Here you can enter a time (one to five minutes) when a programmed recording (Timer) should start earlier and end later. This could be necessary if the information from the GUIDE Plus+® system about the start and stop time always differ from the actual start and stop time.

'Set up'



'System'

In this menu, you can select one of the following features:

'Auto delete'

If there is no space for new recordings on the HDD, you can determine here whether recordings will be automatically deleted or not. You can see the titles and the sequence according to which they will be deleted in the '*Delete Order*' setting in the media browser. For more information, read the chapter 'The Media Browser'.

O 'On':

Recordings will be automatically deleted in the following order:

- 1) Titles that have already been viewed. Symbol '.
- 2) Titles that were not protected. No symbol '√' available.

O 'Off':

No recordings will be automatically deleted.

'Jump forward'

Set the time you want to jump forward when you press **JUMP FWD** in the time shift buffer.

'Jump back'

Set the time you want to jump backward when you press **JUMP BACK** in the time shift buffer.

Use the setting 5 minutes for *Jump forward* and 1 minute for '*Jump back*', to make it easy to skip unwanted scenes.

'Installation'

Please observe that for selection of function in this menu the Time shift Buffer will be flushed. If the 'Time Shift Buffer' contains important recordings, save them with the **REC/OTR** ● button first. Read additional information about the 'Time Shift Buffer' in the chapter 'The Time Shift Buffer'.

O 'Autom. search':

Automatic channel search

O 'Follow TV':

Sorting TV channels automatically

O 'Manual search':

Manual TV channel search

O 'Sort TV channels':

Sorting TV channels manually

O 'Time/Date':

Setting/Correcting the time and date

For more information, please read chapter 'Additional installation features'.

'Flush Buffer'

Using this function, you can store recordings on the HDD that were marked for recording in the time shift buffer. Recordings that were not marked will be deleted.

O 'Yes':

Recordings will be stored

O 'No':

This interrupts the process

Additional user preferences

General

This section describes how you can make additional personal settings. The symbols have the following meaning:

- Picture settings
- **I** Sound settings
- Language settings
- Additional settings
- P Disc settings

Preparation:

- •) The TV set is switched on, and if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- Press the DISC MENU button and then the SYSTEM MENU button on the remote control.
 - → The menubar appears.

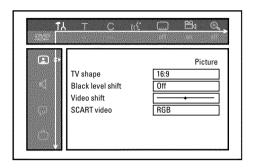


If this menubar is not complete visible on your wide screen TV-set, change the picture settings on your TV.

- 2 Select '7人' using ◀ oder ▶ and confirm with
- Select the corresponding function using ▼ or ▲ and confirm with ►.
- Select the corresponding line using ▼ or ▲ and confirm with
 For more information on each function, read the following pages.
- 5 Select the corresponding function using ▼ or ▲ , or the setting with ◀ or ▶ . Select the functions you want to change as described in the following pages.
- 6 Confirm the new setting with OK.
- **7** Close the menu item with ◀ .

Picture settings

You can select the following functions in this menu:



'TV shape'

The picture signal from your DVD recorder can be set to match your TV set:

O '4:3 letterbox'

for a widescreen picture with black bars at the top and bottom

O '4:3 panscan'

for a full-height picture with the sides trimmed.

O '16:9'

for a widescreen TV set (16:9 screen ratio)

'Black level shift'

Adapts the colour dynamics for NTSC playback when switched to 'On'

'Video shift'

Use this feature to adjust the position of the picture on your TV left or right using \blacktriangleleft , \blacktriangleright to suit the screen of your TV set.

'SCART video'

Since RGB and S-VIDEO signals sometimes use the same connections on a scart cable, the two signals cannot be transmitted simultaneously. With these settings, you can decide whether RGB or S-VIDEO signals are to be transmitted. This setting affects only the scart sockets of the DVD recorder (EXT1 TO TV-I/O output socket and EXT2 AUX-I/O input socket).

Please also observe which signals are available at which scart socket of the TV set or how the scart sockets need to be switched.

If necessary, consult the instruction manual of your TV set.

O 'RGB'

Depending on the TV set you are using, switching between the 'RGB' and the 'Video(CVBS/FBAS)' signal is done automatically. If the picture scrolls to the side or colour quality problems appear on some TV sets when the setting is '*RGB*', you must select '*CVBS only*'.

Additional user preferences

O 'S-Video'

Only the S-Video signal will be processed at both scart sockets (**EXT1 TO TV-I/O** output socket and **EXT2 AUX-I/O** input socket).

In case the scart socket of the TV set is not suitable for S-VIDEO (Y/C) signals, you will only see a black&white picture, although the recording will be made in colour. Moreover, only the video (CVBS, FBAS) signal will be used for recordings via the EXT1 TO TV-I/O scart socket. Please observe that when making recordings from a video recorder that transmits only video (CVBS/FBAS) signals through the scart cable, recordings via scart socket EXT2 AUX-I/O may be made in black and white. Therefore, use this setting with caution.

O 'CVBS only'

Only the video (CVBS/FBAS) signal is transmitted, regardless of the video signals (RGB, Y/C) at the scart sockets. This setting is selected automatically when no 'RGB' or 'S-VIDEO' signal is detected at the scart socket.

When selecting the settings 'S-Video' or 'CVBS only', the RGB signal is switched off.

The 'RGB' signal is switched off.

O 'S-video + YPbPr'

Component Video (YUV) and S-Video(Y/C).
GUIDE Plus+® menus only available on YUV ouput sockets.

O 'CVBS + YPbPr'

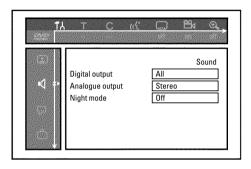
Component Video (YUV) and Video (FBAS/CVBS).
GUIDE Plus+® menus only available on YUV ouput sockets.

With all other settings, the signal is switched off at the **COMPONENT VIDEO OUT** sockets. This will also be displayed as information on the screen.

Sound settings

You can select the settings in this menu depending on which audio outputs are used.

If you only use the analogue audio output (red and white socket AUDIO OUT L/R), select the setting 'Off' in the 'Digital output' menu.



'Digital output'

You can select one of the following settings for devices that are connected to the **COAX OUT** or **OPTICAL OUT** sockets:

O 'AII

Dolby Digital and DTS signals are fed unaltered to the digital output. MPEG-2 multi-channel signals are converted to PCM (Pulse Code Modulation).

For receivers/amplifiers with digital multi-channel decoders.

O 'PCM only'

Digital and MPEG-2 multi-channel signals are converted to PCM (Pulse Code Modulation). For receivers/amplifiers without digital multi-channel decoders.

O 'Off'

Digital output switched off.
For devices with analogue audio input.

'Analogue output'

You can select one of the following settings for devices that are connected to the analogue audio output ():

O 'Stereo'

For devices without DolbySurround or TruSurround. Use this setting if the DVD recorder is only connected to a stereo TV set.

O 'Surround'

Dolby Digital and MPEG-2 multi-channel are mixed down to a Dolby Surround-compatible two-channel output signal. For devices with Dolby Surround / Pro Logic Decoder .

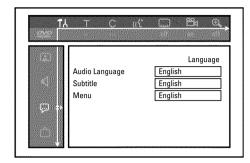
'Night mode'

Night mode optimises the sound for playback at low volume. You are therefore less likely to disturb your neighbours. This only works with Dolby Digital audio on DVD video discs.

Additional user preferences

Language settings

You can select the following settings in this menu:



'Audio Language'

Playback audio language.

'Subtitle'

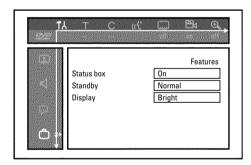
Subtitle language

'Menu'

Screen menu language

Additional settings

You can select the following functions in this menu:



'Status box'

During play back from a disc, information of the current operating status (counter, playback) will be shown on the TV screen. You can switch off the information about the operating status so that the on-screen display is not recorded when making recordings on additional devices.

O 'On'

The OSD information appears for a few seconds in each selected mode and then disappears.

O 'Off'

The OSD information is switched off. It is **no longer** displayed on the screen.

'Standby'

You can switch off the clock display on your DVD recorder to save energy. Programmed recordings will be carried out despite of this. In addition, you can have the most important features of your DVD recorder appear in scrolling text in the display (demo).

O 'Low power':

When the DVD recorder was switched off using **STANDBY** \circlearrowleft , the clock display is also switched off.

O 'Normal'

When the DVD recorder was switched off using **STANDBY** \circlearrowleft , the clock display remains visible.

O 'Demo mode':

When the DVD recorder is switched off using STANDBY \circlearrowleft , a list of the most important features appears in the display.

'Display'

You can change the brightness of the display on the DVD recorder. This setting only affects the DVD recorder when it is switched on.

O 'Bright':

The display appears with normal brightness. The disc tray light is switched on.

O 'Dimmed':

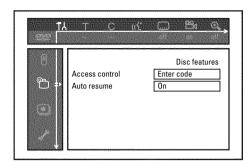
The display appears less bright. The disc tray light is switched off.

O '*Off*':

The display and the disc tray light are switched off.

Disk feature menu

In this menu, you can make changes that relate to the disc:



'Access control'

Please read the next chapter 'Access control (child lock)'.

Auto resume

If playback of a pre-recorded DVD video disc or video CD is interrupted (using STOP \blacksquare or OPEN/CLOSE \triangleq), playback will resume where it stopped after you reinsert the disc. This applies not only to the current disc but also to the last 20 discs you played.

You can switch off this feature if you do not want it.

'PBC'

This line appears only if you insert a VCD.

Using this function, you can activate or deactivate the PBC menu (Playback Control) of a Video CD. For more information, read section 'Playing a (Super) Video CD' in chapter 'Playback'.

'Finalise disc'

This function allows you to finalise DVD+R discs. If the disc has already been finalised, this line will appear darker.

'Adapt disc format'

If a DVD+RW has been recorded in a PC drive or a different DVD recorder, the index screen may not be displayed properly. This feature allows you to adjust the format of the disc. Therefore, this feature is only visible if the disc format is different.

Access control (Child Lock)

Child lock (DVD and VCD)

This feature enables discs to be locked for children.

When Child Lock is on, a 4-digit code (PIN) needs to be entered before a disc can be played.

You can also decide whether the inserted disc should always be played or should be played only once, despite the child lock

·)'Play always':

This disc is stored in a memory with space for 50 child-safe discs. If more than 50 discs are stored, the last disc in the list is removed and the new disc is added. The screen shows 'Child safe' at the start of playback.

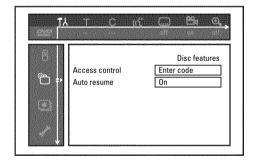
·)'Play once':

This disc is only authorised for single playback. If the recorder is switched off, the PIN code must be re-entered.

Activating/deactivating child lock

Preparation

- •) The TV set is switched on, and if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- 1 Press TUNER and then SYSTEM MENU on the remote control. If playback from a disc starts automatically, remove the disc (button OPEN/CLOSE ▲).
 - The menubar appears on the screen.
- 2 Select the 'T从' icon using ◀ or ▶.
 - → The 'SYSTEM MENU' appears.
- **3** Select ' $\overset{\circ}{\Box}$ (**Disc features**)' using \triangledown or \blacktriangle and confirm with \blacktriangleright .



- 4 Confirm 'Access control' using ▶.
- Enter a 4-digit code of your choice. This code will also be used for locking titles on the HDD (Media Browser).
 - → If the code is new, you may have to enter the code a second time as confirmation.
- **6** Select '*Child lock*' using lacktriangle or lacktriangle and confirm with lacktriangle .
- **7** Select the '⊕' icon using \blacktriangledown or \blacktriangle .

- 8 Confirm with OK.
- 9 Quit the feature using ◀ and SYSTEM MENU.

Unauthorised discs can only be played by entering the four-digit PIN code.

To deactivate the child lock, select the 'i' icon in 7.

Authorising a disc

- 1 Insert a disc. The access control box will appear after a short delay.
- 2 Using ▲ or ▼ select 'Play once' or 'Play always'.
- 3 Enter your PIN code using the number buttons 0..9.

Double-sided DVDs may have a different ID for each side. For these discs, each side must be authorised. Video CDs may have a different ID for each disc. For these CDs, each disc must be authorised.

Locking unlocked discs

To lock a disc that was formerly authorised follow the instructions below

- 1 Insert a disc. Playback starts automatically. If the playback does not start automatically, press PLAY ►.
- 2 Press the STOP button while the 'safe or icon is visible. The icon changes to 'locked or icon cha

Access control (Child Lock)

Parental level control (DVD video only)

Films on pre-recorded DVD discs may contain scenes not suitable for children. Therefore, some discs may contain 'Parental Control' rating information that applies to the entire disc or to certain scenes on the disc.

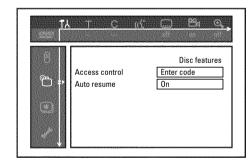
The appropriate scenes have filter values that reach from I-8. If such a scene is detected during playback, the filter value set on the DVD recorder is compared to the scene. If the filter value is higher than the setting, an alternative scene will be played (if available).

Most DVDs apply the rating to an entire DVD. Therefore, if certain scenes exceed the rating you select, the entire disc will be blocked from viewing.

Activating/deactivating parental level control

Preparation

- •) The TV set is switched on, and if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- 1 Press DISC MENU and then SYSTEM MENU on the remote control.
 - → The menubar appears.
- 2 Select the ' T_{A} ' icon using \blacktriangleleft or \triangleright .
- 3 Press the SYSTEM MENU button on the remote control.
- 4 Select the 'T人' icon using ◀ or ▶.
- 5 Select '♠'(Disc features)' using ▼ or ▲ and confirm with ▶.



- 6 Confirm 'Access control' using ▶.
- The Enter a 4-digit code of your choice. If the code is new, you may have to enter the code a second time as confirmation.
- 8 Select the 'Parental level' using ▲ or ▼ and confirm with ▶ . A bar appears to select the parental level.
- **9** Select the appropriate rating using ∇ , \triangle or the number buttons 0..9.

What do the ratings mean?

Rating 0 (displayed as '-') parental control not active.

Rating I (suitable for children)

Rating 8 (only suitable for adults)

What happens if a DVD scene contains a higher level than the rating set?

If the recorder does not find a suitable alternative, playback will stop and you must enter the four-digit code.

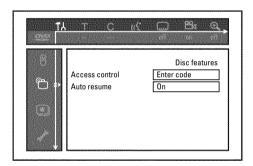
1 Confirm with OK . Quit using ◀ and SYSTEM MENU .

Changing the country

The set filter values depend on the respective country. It is therefore necessary to enter the country to which these filter values apply.

Preparation:

- •) The TV set is switched on, and if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- 1 Press the TUNER and then the SYSTEM MENU button on the remote control.
 - → The menubar appears on the screen.
- 2 Select the 'T从' icon using ◀ or ▶.
- 3 Select line '⊕(*Disc features*)' using ▼ or ▲ and confirm with ▶ .



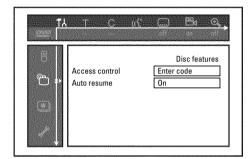
- **4** Confirm the line 'Access control' using ▶ .
- 5 Enter your four-digit code. If the code is new, you may have to enter the code a second time as confirmation.
- **6** Select 'Change country' using ∇ or \triangle and confirm with \triangleright .
- 7 Select the corresponding country using ▲ or ▼ and confirm with OK
- **8** To end, press **◄** and then **SYSTEM MENU**.

Access control (Child Lock)

Changing the PIN code

Preparation:

- •) The TV set is switched on, and if necessary, the programme number for the DVD recorder has been selected.
- •) the DVD recorder is switched on.
- 1 Press the TUNER and then the SYSTEM MENU button on the remote control.
 - → The menubar appears.
- 2 Select the 'T\' icon using ◀ or ▶ .
- 3 Select '⊕(*Disc features*)' using ▼ or ▲ and confirm with ▶ .



- 4 Confirm 'Access control' using ▶.
- 5 Enter your four-digit PIN code. If the code is new, you may have to enter the code a second time as confirmation.
- 6 Select 'Change code' using ▲ or ▼ and confirm with ▶.
- Tenter the new code using the number buttons 0..9. Enter the same code again as confirmation.
- 8 Quit using ◀ and SYSTEM MENU.

I have forgotten my code

Press **STOP** ■ four times (step **5**), then press **OK** . Access control is now switched off. You can now enter a new code as described above.

Information on the screen of your TV

You can check or change many of the functions and settings of your DVD recorder via the system menu bar.

Symbols in the menu bar

Press **DISC MENU** and then **SYSTEM MENU** to open the menu bar. If a disc is played back, you can open the menubar with **SYSTEM MENU**.

Use ◀ and ▶ to select the relevant function.

Use $\ lacktriangledown$ to confirm the function and go either to another menu or execute the function directly.

Some functions may not be available, depending on the disc inserted.

Menu bar I



- The User preferences
- **⊤** Title/track
- Chapter/index
- ((Audio language
- Subtitle language
- Camera angle
- ① Zoom

Menu bar 2

While menu bar I is being displayed you can go to menu bar 2 by pressing ▶ again.



- **∮** Sound
- **√** Frame advance
- **▶** Slow motion
- Fast motion
- Search by time

Field for temporary messages

The top left corner of the menu line contains a field for temporary messages relating to the various operating modes. This information appears briefly on the screen when certain disc functions have been activated:

- Shuffle Shuffle
- Scan Scan
- Repeat entire disc

- Repeat title
- Repeat track
- Repeat chapter
- Repeat from A to the end
- Repeat from A to B
- 🚗 Camera angle
- Child lock enabled
- Resume playback

Status field

During playback of a disc, the status field shows the current operating mode (status) of the DVD recorder and the type of disc inserted. This display can be switched off.

Disc type symbols

- © DVD+RW
- OND+R
- DVD-Video
- © Video-CD
- ⊜ No disc
- D Error

Operating mode symbols

- Recording
- stop Stop
- ▶ Playback
- II Playback-Pause
- ●II Record-Pause
- Search forwards (8x speed)
- Search backwards (8x speed)
- ⊳ Slow motion

Information on the screen of your TV

The symbols on your DVD recorder display



These symbols can light up on your DVD recorder display:

Multi-function display/text line

- •) Clock
- •) Disc/title playing time
- •) Title name
- •) Display of the programme number of the TV channel/playing time/channel name/function.
- •) Display of information and alerts
- •) Display of the title from the actual recording.

IIIIIIIIIII Position/Diskbar: Displays the current position on the HDD/disc.

<u>Time Shift Buffer</u> Displays the elapsed time. If all segments lits, the oldest recording will be deleted from the Time Shift Buffer.

Play/Record: No segment will lit at the current position.

Pause: Flashing segment at the current position.

Stop: Nothing appears.

SAT An automatic recording from a satellite receiver (SAT recording) has been programmed.

TIMER A recording (timer) has been programmed

O(((A remote control signal has been received

VPS/PDC Video programming system / programme delivery control: A VPS or PDC code is transmitted for the selected TV program

LANG II During playback a 2-channel tone was detected or a 2-channel tone was received. 'I' or 'II' lights up depending on which sound channel has been selected

Messages in the DVD recorder display

REATING

The following messages may appear in your DVD recorder display

15 TV CNP The DVD recorder is in initial installation mode. Switch the TV on, then read the paragraph on 'Initial installation' in 'Installing your DVD recorder'.

NO 515NAL No input signal available (signal inadequate or unstable)

MENLI The menu on the screen is active

GPENING Disc tray opening

TRAY OPEN Disc tray open

EL051NG Disc tray closing

REALING Disc being read

MENU LIPIT Once recording has been successfully completed the table of contents is created.

INIT MENU The menu structure is created after the first recording has been made on a new disc

[The state of the

During the display [GPY PRG] no recording will be made. A running recording will be interrupted.

WRII Please wait until this message disappears. The DVD recorder is busy performing a task.

No III SE A disc has not been inserted for recording. If a disc has been inserted, it cannot be read.

INF Information about the inserted DVD is displayed on the screen

IUSY The DVD recorder is processing the changes to make the disc DVD compatible

ERASING The entire DVD+RW is being erased

EMPTYINSE The DVD+RW/+R inserted is either new or has been completely erased (no recordings).

PRUTELIE The DVD+RW/+R inserted is protected against recording. How to remove this protection you will read in the section 'Protect disc against accidental recordings' in the chapter 'Recording on a DVD+RW/+R'.

MAX TITLE The maximum number of titles per disc/HDD has been reached. The maximum number of titles on a disc is 48 and on the HDD 499.

MAX EHRP The maximum number of chapters within a title/or the disc has been reached. The maximum number of chapters is; DVD+RW/+R: within a title 99, on the disc 255 (spreaded over the whole disc)

Information on the screen of your TV

- HDD: within a title 500, on the HDD 1000 (spreaded over the whole HDD) $\,$
- III SE FULL The disc/HDD is full. There is no space for new recordings
- FRL IISE A disc with PAL recordings has been inserted. The machine is trying to record an NTSC signal. Insert a new disc or one that contains NTSC recordings.
- NTSE IIISE A disc with NTSC recordings has been inserted. The machine is trying to record a PAL signal. Insert a new disc or one that contains PAL recordings.
- RECORDING An illegal action (e.g. **OPEN/CLOSE ≜** button) was attempted during recording on a DVD+RW/+R (archiving).
- FREETITLE An empty title on a DVD+RW/+R is selected.
- IIISE LOCK An attempt has been made to record during playback of a protected disc. This message appears if an attempt is made to insert a chapter marker on this inserted DVD+RW/+R.
- IIISE ERR An error occurred when reading the title from a DVD+RW/+R. If this error keeps occurring, please clean the disc or use a new one. For instructions on how to clean a disc see the section on 'Cleaning the discs' in the next chapter.
- II SE WARN An error occurred when writing the title on a DVD+RW/+R. Recording was continued; the error was skipped
- SETUP After the automatic search the menu for setting the date/time will appear on the screen.
- ₩RIT ☐ 1 During the automatic channel search the TV channels found will be counted.
- IL IEKE I The disc tray cannot be closed/opened.
- SHFE REE During the archiving procedure, the new recording will be added at the end of all the other recordings (SAFE RECORD).
- P05T-F0RMRT After the creation of the menu structure the DVD+RW/+R is prepared
- PHILIPS The DVD-Recorder has been switched on
- 5TRNIBY The DVD-Recorder has been switched off
- 511 IF The GUIDE Plus+® system is switched on

If you have any problems using this DVD recorder, the reason may be one of the following. You can also call the **customer service centre** in your country.

The telephone numbers can be found on the back of this instruction manual.

You can also visit our web page 'http://www.p4c.philips.com'.

Have the model number (MODEL NO) and the production number (PROD.NO) of your recorder ready.

The production number (PROD. NO.) is printed on the type plate at the back or on the bottom

PROBLEM

SOLUTION

Your recorder does not respond to any button being pressed and the display shows 'PHILIPS', '15 TV DNP':

✓Recorder in initial installation mode: Switch on the TV, switch over to the DVD recorder socket.

Now the menu for language selection should appear. Please read paragraph 'Initial Installation' in the chapter 'Installing your DVD Recorder'.

The device does not react when you press a button, although the remote control works:

- √'Dealer-Mode' is switched on: All buttons on the front of the set are locked.

 Switch off the function:
 - 1 Pull out the mains plug from the wall outlet.
 - 2 Press and hold down and OPEN/CLOSE and put back the mains plug into the wall outlet
 - 3 As soon as the time or '--:--' appears in the display (ca. 6 10 seconds), release and OPEN/CLOSE ▲.

Your DVD recorder does not respond to any button being pressed:

- \checkmark There is no power supply: check the power supply
- √There is a technical problem: disconnect from the mains power supply for 30 seconds, then connect again.

 If this doesn't help, you can reset your DVD recorder to the default factory settings.

√Important:

All the information stored (TV channels, time and date, TIMER) will be lost.

- Resetting the machine to the default factory settings
- 1 Disconnect from the mains power supply.
- 2 Press and hold down the **STANDBY-ON** (b) button on the device and reconnect to the mains power supply.
- **3** Release the **STANDBY-ON** \circlearrowleft button when the features appears on the display. All the information stored (TV channels, time and date, TIMER) will be lost.

Please read paragraph 'Initial Installation' in the chapter 'Installing your DVD Recorder'.

Remote control does not work:

- ✓ Remote control not pointed toward the DVD recorder: Point the remote control at the machine. See if the 'o(((' appears on the display briefly each time you press a remote control button. If it does, the Recorder is receiving information from the remote correctly.
- √There is a technical problem: Take out the batteries, wait for 10 seconds and put them in again.
- ✓Batteries are flat: Change the batteries.

I can not switch off the DVD-Recorder:

✓ A recording is in progress (red light around the **REC/OTR** ● button is switched on). After the recording is finished, the DVD-recorder will switch off automatically.

Fans run with switched off DVD recorder:

✓ For the execution of certain procedures the DVD recorder can switch itself on automatically, although no information is visible on the display. To prevent overheating, the fans at the back will be switched on and off automatically

This is no foult of your set.

PROBLEM	SOLUTION	
No playback on DVD recorder:	 ✓There is no recording on the HDD/disc: Check the titles from the HDD in the media browser (button BROWSER HDD), change disc. ✓You inserted the wrong disc type: Your recorder can play back the following disc types: DVD Video, (Super)Video CD, DVD+R(W), Audio CD, , MP3-CD's ✓You inserted the disc the wrong way: Insert the disc with the label facing upwards ✓Disc is dirty: Clean the disc ✓Wrong region code: The region code of the DVD and the DVD recorder must match. ✓Parental control is on: Read chapter 'Access control (child lock)' ✓Parental control is on fro titles from the HDD: Read chapter 'Access control (child lock)' ✓You have selected the wrong programme number for the DVD recorder on the TV: on the TV, select the correct programme number for the DVD recorder. ✓The cable connecting the TV set and the DVD recorder has come loose: check the cable. 	
I cannot playback (Super) Video CDs	 ✓It is possible that this (Super) Video CD contains a menu and the 'PBC' is switched off. You can see this in status field 'PBC OFF'. To activate this function, proceed as follows: Press SYSTEM MENU while the (Super) Video-CD is inserted. Select 'T\(\)' using \(\Pi \) or \(\D \). Select line 'Features' using \(\Pi \) or \(\D \) and confirm with \(\D \). Select 'On' in line 'PBC' using \(\Pi \) or \(\D \). Confirm with \(\OK \) and end with \(\SYSTEM MENU \). ✓ Check the format of self recorded (s) VCD's (1.0, 1.1, 2.0). Play back of (S) VCD's in a different format can be distorted. 	
Poor playback on DVD recorder: (distorted picture/distorted sound)	 ✓Your TV set is not properly adjusted. ✓ Disc is dirty: Clean the disc ✓ Sometimes the picture may be temporarily distorted. This is not a defect of your DVD recorder. 	
Digital distortions	√The low quality of some digital picture material may be the cause of digital image distortion. In this case change the setting of the sharpness or the picture settings. If your TV is equipped with a 'Smart picture' function, select the 'Soft' setting, without changing the picture settings manually.	
No recording on the HDD possible:	√The TV channel you want to record is not stored or you selected the wrong programme number: Check TV channels stored.	
No recording on the a DVD+RW/+R possible:	 ✓ Disc write-protected (recording protected): Remove write-protection or change the disc. For more information, please see 'Preventing accidental erasing of discs' in chapter 'Manual Recording'. ✓ An already finalised DVD+R has been inserted: Change disc. 	
Programmed recording does not work:	 ✓You have programmed the wrong time or date: Check time/date. ✓If the time and date are wrong despite setting them by hand, you can switch 'SMART CLOCK' (Clock preset) off. See 'Setting the time/date' in 'Installing your DVD recorder'. ✓You have not set the TIMER properly: Check the programmed recordings (TIMER block). ✓'VPS/PDC' switched on but 'VPS/PDCtime' wrong: 'Enter 'VPS/PDCtime exactly to the minute. Check the aerial. 	

PROBLEM	SOLUTION
The wrong TV channel was decoded (recorded) after you programmed a recording using ShowView System.	 ✓ The programme number of the TV channel is not available in the GUIDE Plus+® system or allocation is wrong. To change or check the channel data, proceed as follows: Press GUIDE/TV. Press ▲. Select 'Editor' with ▶. Select the TV channel using ▼ or ▲. Press ▶ to go to the right tile. In case you can receive the selected channel only via an external receiver, press the red button to select the corresponding source. Press the green button. Enter the programme number of the TV channel using the number buttons. If the source you have selected is an external receiver, enter the programme number that you would also enter at the external receiver for this TV channel. Confirm with OK.
There is no channel overview in the GUIDE Plus+® system	✓DVD recorder is switched on: Switch off the DVD recorder to allow data transfer ✓The TV channel that transmits the GUIDE Plus+® data is not set properly. ✓External receiver (satellite receiver, set-top box, cable TV box,) (if available) is switched off: switch on the external receiver ✓G-LINK cable is not connected: Connect the G-LINK cable and make the necessary settings to control the external receiver (see chapter 'The GUIDE Plus+® system', section 'Installation of the 'External receiver 1").
Missing or wrong TV channel in the 'Grid' screen	✓Wrong local post code/country was entered ✓Please check your correct channel line up in the ' Grid ' screen. Read therefore the section 'The ' Editor ' screen.
When you press GUIDE/TV the GUIDE Plus+® setup screen will appear	 ✓ The GUIDE Plus+® system was not completely installed or local post code was not entered. 1 Check the settings 2 Select the corresponding line using ▼ or ▲ and confirm with OK. 3 For more information on the individual functions, see chapter 'The GUIDE Plus+® system', section 'Setting up the GUIDE Plus+® System'.
The external receiver does not always react to Remote control signal.	✓The Infrared (IR) Remote control signal interfere with the IR signal of the G-LINK transmitter. Put the G-LINK transmitter closer to the front of the external receiver.
My external receiver switches automatically through the TV channels	✓ If the DVD-Recorder is switched off (STANDBY ⁽⁾ button) the external receiver will be used from the GUIDE Plus+® system via the DVD-Recorder. If you want to watch TV-Channels from the external receiver, you have to switch the DVD-Recorder on.
There is picture or sound interference on TV reception:	 ✓ Before recording, select the recording mode as described in chapter 'Manual Recording', section 'Selecting the recording mode (quality)'. ✓ Have your aerial checked. ✓ You will find information on how to change the TV system in 'Manual TV channel search' in 'Installing your DVD recorder'.
Distorted sound coming from a connected hi-fi amplifier	√The DVD recorder is connected to the 'Phono-input' of your amplifier: This socket is provided only for a record players without a preamplifier. Select a different audio input.

PROBLEM	SOLUTION		
The picture is distorted or black-and-white during playback	 ✓ The TV system of the disc does not match that of your TV set (PAL/NTSC). ✓ The recording can be made in colour only when the TV channels or the connected additional device send a colour signal. Black-and-white signals containing no color information (colour subcarriers) cannot be recorded. 		
No sound signal at the digital output	✓ Check whether the sound settings match the selected inputs and connected additional devices. For more information, see section 'Sound setting' in chapter 'User preferences'.		
There could be difference in the search speed of a DVD and DVD+RW	✓ Depending on the different structure of a DVD and a DVD+RW/+R this can lead to the different search speeds. This is not a fault in your machine.		
A DVD+RW disc cannot be played on certain DVD players	 ✓ If a recording is too short, it is possible that a DVD player cannot detect it: Please observe the following 'Minimum recording times': Recording mode 'M1': 5 minutes, 'M2': 10 minutes, 'M2x': 13 minutes, 'M3': 15 minutes, 'M4': 20 minutes, 'M6': 30 minutes, 'M8': 30minutes, ✓ Some DVD players cannot play back DVD+RW recordings. You can solve this problem by using a special function: Open the disc tray with OPEN/CLOSE ▲. Insert the disc but do not close the tray. Hold down the number button 2 on the remote control until the tray closes. The disc is modified. If this fails to produce the desired result, repeat the procedure using the number button 3 on the remote control. You can restore the disc to its original condition by pressing 1. Warning! There is a risk that you can no longer play the disc on other DVD players after this procedure. Therefore, apply this function with particular care. 		
Other disc errors (DVD+RW)	 ✓ If it is impossible to play back a disc, you can try and repair it for new recordings using the following function. This will only prepare the disc for erasing. It will not be erased, however, until the recording has been completed. ① Clean the disc ② Open the disc tray with OPEN/CLOSE ▲ . Insert the disc but do not close the tray. ③ Hold down the red function button on the remote control until the tray closes. The disc is prepared for erasing. ④ Start recording as with an empty disc. 		
Other disc errors (DVD+R), 'Disc contains unknown data' interruption of a recording (power outage)	 ✓This message may appear if you instert a DVD+R that was not finalised or an error occurs during the recording. DVD+R's that have not been finalised are very sensitive to fingerprints, dust, or dirt. This may cause problems during recording. To use the disc again, follow the next steps Make sure that the surface of the disc is clean. Open the disc tray with OPEN/CLOSE ▲ . Insert the defect DVD+R but do not close the tray. Hold down 5 on the remote control until the tray closes. The disc will be read ('REFILING' appears on the display) and the DVD recorder will start the repair process. This may take up to four times as much time as the recording, in which the error occurred. If the disc is recovered, the index screen will appear. Please observe the following: The recovering procedure is successfully only if there was a previous recording on the disc. Error during recording: The title may be missing. Error while changing the title/index picture: The original title/index picture may be visible. Error while finalising: The disc appears not to have been finalised. 		

PROBLEM	SOLUTION
The index screen flickers when a DVD+R is inserted	 You can finalise the disc using the following function: Open the disc tray with OPEN/CLOSE ▲ . Insert the defect DVD+R but do not close the tray. Hold down 4 on the remote control until the tray closes. FINALIZE appears in the display. Finalising begins. This may take up to three minutes. If finalising has been successful, the index screen will appear.

Chapters

Also known as 'scenes', a DVD movie can be broken up into sections much like the chapters of a book, that can be accessed quickly and easily via the DVD menu or remote control.

Component Video (Y Pb Pr)

This method of transmitting pictures produces the highest quality as the video signal is split into its Y (brightness), U and V (blue minus brightness, red minus brightness) components. The signals are transmitted via separate cables. The plugs on these cables and the associated sockets are mostly coloured red, green and blue.

NICAM

NICAM is a digital sound transmission system. Using NICAM, you can transmit either I stereo channel or 2 separate mono channels. However, if reception is poor and the sound distorted you can turn off NICAM.

NTSC

National Television Systems Committee. The colour TV broadcast system used in the US, Canada and Japan. An NTSC picture is made up of 525 horizontal lines and has inferior picture quality in comparison to the PAL system. All Australian-sold DVD players are NTSC compatible, however DVD's that are played on a television that is not compatible will appear in black and white.

PAL

Phase Alternating Line. The colour TV broadcast system used in Australia, UK & Europe. A PAL picture delivers a better quality picture than NTSC due to its 625 horizontal lines (sharper picture and better colours).

Region code

Since DVD films are not normally released in all parts of the world at the same time, all DVD players have a specific regional code. Discs can be given a regional code. If the regional codes differ between the player and the disc, playback is not possible.

The regional code of the DVD recorder is shown on the type plate at the back or bottom.

2-channel sound

Some TV programmes transmit an extra audio signal in stereo in addition to the normal audio signal (2-channel sound). In most cases this means that an additional language is available. If a TV programme is available in, say, English and German, German may be available as the second language.

To record TV programmes in 2-channel sound, you can select the language you want as the default setting. This setting does not become active until the sound of a TV programme is transmitted in 2-channel sound.

When you play back the recording you can play back the sound only in the language you used for the recording.

Macrovision

Macrovision is a copy-protection technique intended to keep you from making copies of DVDs with your VCR. It works by continuously adjusting the video signal level that results in a recording where the brightness of the picture continuously fluctuates between light and dark, and the color levels fluctuate between oversaturated and washed out. Macrovision "encoded" DVDs contain a bit of data that tells the DVD player to activate its internal macrovision circuitry in order to prevent copying.

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Storage media

Hard Disc recording: 80 Gb HDD

TV systems

PAL/NTSC Playback: Recording: PAL/NTSC Internal tuner: PAL/SECAM

Optical disc

- percar are		
-	Playback	Recording
DVD+RW	•	•
DVD+R	•	•
DVD-R/-RW, video mode	•	-
DVD-Video	•	-
Video CD, Super VCD	•	-
Audio CD	•	-
MP3 CD	•	-
CD-R/RW	•	-

Video Format

DVD, SVCD: MPEG2 Digital compression VCD: MPEGI

Record modes

Max HDD recording time: 120h Max DVD recording time:

			Bit rate	
Mode	Rec.time	Resolutio-	Video	Audio
		n	(Mbit/s)	(kbit/s)
MI	60'	DI	9.72M	384k
M2	120'	DI	5.07M	256k
M2x	150'	DI	4.06M	256k
M3	180'	1/2 D1	3.38M	256k
M4	240'	1/2 D1	2.54M	256k
M6	360'	1/2 D1	1.70M	256k
M8	480'	SIF	1.27M	192k

Resolution H x V	50Hz	
(pixels)		
Full D1 (DVD-Video)	720×576	
Half D1	360×576	
SIF (VCD)	352×288	
TV Standard	NTSC	PAL/
		SECAM
Scan frequency	60Hz	50Hz
Number of lines	525	625
Playback	•	•
Recording	•	•
Internal tuner	-	•
micernal carrel		

Video Performance

DA Converter: 10 bit AD Converter 9 bit Signal handling: Components Video (CVBS) out: I Vpp into 75 ohm S-video (Y/C) out: Y: I Vpp into 75 ohm C: 0.286 IVpp into 75 ohm

Component video out

(YPBPR):

Y: I Vpp into 75 ohm

PB: 0.7 Vpp into 75 ohm PR: 0.7 Vpp into 75 ohm

Audio Format

Compressed digital	Playback	Recording
Dolby Digital (AC3)	5.1-	2-channel
	channel*	16-bit, 48
		kHz
DTS, MPEG2	5.1-	-
	channel*	
MPEGI, MP3	2- channel	-
PCM	2-channel	-
	16/20/24 bit	
	48/96 kHz	

*6. I -channel compatible

Audio Performance

DA Converter: AD Converter: 16 bit

DVD fs 96kHz 4Hz-44kHz fs 48kHz 4Hz-22kHz Video CD fs 44.1kHz 4Hz-20kHz Audio CD fs 44.1kHz 4Hz-20kHz

Signal/Noise (1kHz): 105 dB Dynamic range (IkHz): 90 dB Crosstalk (1kHz): 105 dB Distortion/Noise (1kHz): 90 dB

Front Connections

i.LINK DV in: IEEE 1394 4-pin S-video in: Hosiden 4-pin Video in: Cinch (yellow) Audio Left/Right in: Cinch (white/red)

Rear Connections

SCARTI:	CVBS, S-video, RGB out
SCART2:	CVBS, S-video, RGB in
	decoder
Video out:	Cinch (yellow)
Audio L/R out (2x):	Cinch (white/red)
S-video out:	Hosiden 4-pin
Digital audio out:	Coaxial, Optical
RF antenna in:	Coaxial 75 ohms (F type)
RF TV out:	Coaxial 75 ohms (F type)
Mains:	Standard (IEC type)
Component video out:	Cinch (green/blue/red)

Timer Recording

12; I month; daily/weekly Number of events: Record control: VPS, PDC Autom. Sat. Recording: On SCART 2 Timer programming: Manual, ShowView

Electronic Program Guide

Timer programming: GUIDE Plus+/ShowView/Manual Number of events: 12; I month; daily/weekly

General Functionality

Automatic Screen Saver

Backup presets & timer: I year Backup clock & calendar: PDC, Teletext (Time/Date)

Auto clock set (SMART

CLOCK):

Audio recording level:

Automatic

16:9 (pin8), Follow TV, TV-related functions:

Direct Record

DVD/CD playback

- Fast Forward/Backward)
- Step Forward/Backward
- Slow
- Direct Title/Track access
- Next/Previous Title/Track/Chapter
- Repeat (Chapter/Title/All) or (Track/All)
- A-B Repeat
- Shuffle
- Intro Scan
- Time Search
- \bullet Zoom (1.33x, 2x, 4x) with picture enhancement
- Auto Resume (20 discs)

MP3 CD playback

- Time display (Track)
- MP3 text (ID3 tags) display
- · Album and track selection
- Repeat (disc/album/ track)
- Variable Bit Rate of 32-256 kbit/s
- 32, 44.1, 48 kHz sampling rates
- ISO9660 file system
- Single session
- Nested directories supported to 8 levels
- Up to 32 album numbers
- Up to 999 tracks

Power Supply

Power supply: 200-240 V, 50 Hz Power consumption Operation 38 W Low-power standby 8 W

Cabinet

Dimensions (W \times H \times D): 435 \times 76 \times 335 mm Net Weight: 4.0kg

Remote Control

• Multi brand remote control

Package Contents

- DVD Video Recorder/Harddisc
- Remote Control + batteries
- User Manual
- AC power cable
- · Coax RF antenna cable
- SCART cable fully connected
- IR-extender cable (G-LINK transmitter)

Philips Consumer Electronics

Data subject to change without notice

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PHILIPS

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